

SIMPLEAIR, INC. * Civil Docket No.
* 2:13-CV-587
VS. * Marshall, Texas
*
* March 17, 2014
*
GOOGLE * 12:45 P.M.

APPEARANCES:

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(Proceedings recorded by mechanical stenography, transcript produced on CAT system.)

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12 P R O C E E D I N G S

13 (Jury out.)

14 COURT SECURITY OFFICER: All rise.

15 THE COURT: Be seated, please.

16 MS. DERIEUX: Your Honor, we were just trying to
17 get out of the way so the jury can get by.

18 THE COURT: I need to bring up an issue before the
19 jury comes in. I understand there's a question about the
20 prior testimony of Mr. Nerieri. Let me hear the party's
21 position on that, starting with Mr. Eichmann.

22 MR. EICHMANN: Thank you, Your Honor.

23 This is testimony from Mr. Nerieri's deposition
24 last August that we plan to play. It was played during the
25 last trial and he was -- it's two clips in dispute -- asked
whether Google ever actually considered moving the servers

1 to avoid SimpleAir's infringement, or whether they have ever
2 purposely located the service, whether it's the GCM or
3 anything else, outside of the United States for the purpose
4 of serving devices in the United States.

5 His testimony is on that. It's frozen in time in
6 August. This case is about infringement that occurred prior
7 to the jury trial in January 2014. We're presenting this as
8 if we're back upstairs January 2014, having this trial now
9 we're just finishing up the damages.

10 They contend that this opens the door about their
11 claimed changes that they've made recently. We don't think
12 that it does that at all. At most, Your Honor, what would
13 open the door is if we said -- and I'm not certain if this
14 does it either, but we're not going to go there.

15 If we said: All right, the jury just found you
16 liable for infringement. What about now? Have you moved
17 the servers now? That would probably open the door.

18 That's not what we're asking. We're saying what
19 did Mr. Nerieri testify in his deposition, and we're leaving
20 it at that. And for all the reasons we've explained, we
21 don't think they should be able to get in this last-minute
22 change, which is something different that they didn't
23 disclose before.

24 THE COURT: Do you have the actual transcript that
25 you can read me what exactly you're wanting to play?

1 MR. EICHMANN: Yes, sir. I can do two things. I
2 can actually play it or read it for you. When it plays, it
3 has the transcript, too, up there.

4 THE COURT: All right. How long is it?

5 MR. EICHMANN: Oh, both clips are less than 30
6 seconds, so it's 15 to 20 seconds.

7 THE COURT: Let's play it then.

8 (Video clip playing.)

9 QUESTION: Has Google ever considered locating the
10 servers for the Google Cloud Messaging Service exclusively
11 outside of the United States so that it could avoid
12 infringing SimpleAir's patents?

13 ANSWER: So we consider and we did move some
14 servers, not exclusively all, to some other countries. And
15 we did, but that's because of where the capacity is. That
16 was the only reason.

17 QUESTION: Has Google ever properly designed a
18 service so that foreign servers will be used to deliver data
19 or messages to U.S. devices as a matter of course, not just
20 as a backup, if the closer one goes down?

21 ANSWER: Could be. I -- I don't know about it.

22 QUESTION: Can you identify any time in which
23 that's ever happened?

24 ANSWER: I just said could be. I don't know about
25 it.

1 (End of video clip.)

2 MR. EICHMANN: That's it.

3 THE COURT: All right. Let me hear from the
4 Defendant.

5 MR. STOCKWELL: Your Honor, in both instances,
6 the jury is hearing this testimony in terms of ever,
7 could be, and ever happened. And, in fact, the
8 evidence, as we've made in our proffers, shows that
9 Google has moved its servers.

10 I mean, we think this is going to open the door.
11 Candidly, Your Honor, it's not really an objection as much
12 as if they play this clip, we think we should be able to
13 respond and show that, in fact, Google has moved its servers
14 overseas. If you listen to the language of the clip, we
15 think this opens the door.

16 THE COURT: All right. Well, the Court agrees
17 that if the Plaintiff plays the clip, they've opened the
18 door, and Defendants may show that they have, in fact, moved
19 the servers.

20 If the Defendant -- excuse me -- if the Plaintiff
21 elects not to play that, then the door's not opened. The
22 decision rests with the Plaintiff, all right?

23 MR. EICHMANN: Understood.

24 THE COURT: All right. Anything else we need to
25 take up before we bring in the jury, from the Plaintiff or

1 the Defendant?

2 MR. DOVEL: Nothing, Your Honor.

3 MR. STOCKWELL: Nothing, Your Honor.

4 THE COURT: All right. Let's bring in the jury,
5 Mr. McAteer.

6 COURT SECURITY OFFICER: Yes, sir.

7 (Jury in.)

8 THE COURT: Welcome back, ladies and gentlemen.
9 Be seated, please.

10 Ladies and gentlemen, I need to give you some
11 preliminary instructions before we proceed with the opening
12 statements from counsel and then get on to the evidence in
13 this case.

14 You have now been sworn as the jurors in this
15 case, and as the jury, you are the sole judges of the facts.
16 You will decide and determine what all the facts are in this
17 case. As a judge, I'll give you instructions on the law,
18 decide questions of law, procedure, and evidence as they
19 arise during the trial. And I will handle the flow of the
20 evidence and maintain the decorum of the courtroom.

21 At the end of the evidence, I'll give you a
22 detailed set of instructions about the law to apply in
23 deciding this case. And I'll also give you a list of
24 questions you are then to answer. This list of questions is
25 called the verdict form. Your answers to those questions

1 will need to be unanimous, and those answers will constitute
2 your verdict in this case.

3 I now want to tell you briefly about what this
4 case is about. This case involves a dispute relating to one
5 United States patent. I know that you've seen the patent
6 video, but I want to give you some detailed instructions
7 here and on the record about how a patent -- about a patent
8 and how one is obtained.

9 Patents are either granted or denied by the United
10 States Patent and Trademark Office, sometimes called, for
11 short, the PTO. A patent is a written document that
12 includes or ends with one or more numbered sentences. These
13 numbered sentences are called the claims of the patent. The
14 claims define the boundaries of what the patent protects and
15 give notice to the public of those boundaries.

16 A valid United States patent gives the patent
17 holder the right for up to 20 years from the date the patent
18 application was filed to prevent others from making, using,
19 offering to sell, or selling the patented invention with --
20 within the United States or from importing it into the
21 United States without the patent holder's permission.

22 A violation of the patent holder's rights is
23 called infringement. The patent holder may try to enforce a
24 patent against persons it believes to be infringers by a
25 lawsuit filed in federal court. That's what we have in this

1 case. The patent involved in this case is United States
2 Patent No. 7,035,914. For convenience, the parties and I
3 will often refer to this simply as the '914 patent.

4 The Plaintiff in this case is SimpleAir, Inc. The
5 Defendant in this case is Google, Inc. SimpleAir owns the
6 '914 patent, which is entitled A System and Method for
7 Transmission of Data. In this lawsuit, SimpleAir has
8 accused certain Google messaging services known as the
9 Google Cloud Messaging, or GCM, and the Android Cloud to
10 Device Messaging service, or C2DM, of infringing the '914
11 patent.

12 In January of this year, this Court presided over
13 a jury trial between SimpleAir and Google in which the jury
14 reached a unanimous verdict in favor of SimpleAir on the
15 issues of infringement and validity. The Court has accepted
16 the jury's verdict finding that Google infringes Claims 1,
17 2, 3, 7, and 22 of the '914 patent and that each of these
18 claims is not invalid.

19 However, the jury in the prior trial was unable to
20 reach a unanimous agreement on the amount of damages that
21 would fairly and reasonably compensate SimpleAir for
22 Google's infringing use of the '914 patent. As a result,
23 this trial will not be concerned with the issues of
24 infringement or validity. This trial will be focused solely
25 on the issue of money damages for Google's use of Claims 1,

1 2, 3, 7, and 22 of SimpleAir's '914 patent.

2 Your job is to decide what amount of money damages
3 are to be awarded to SimpleAir as compensation for Google's
4 infringement.

5 Now, my job in this case is to tell you what the
6 law is, handle procedure, oversee the conduct of the trial
7 as efficiently and effectively as possible. I will instruct
8 you later with more detail on the law of patent damages that
9 you should apply in considering the evidence.

10 Generally, a damages award should put SimpleAir in
11 approximately the same financial position that it would have
12 been in had the infringement not occurred, but in no event
13 may the damages award be less than what SimpleAir would have
14 received had it been paid a reasonable royalty for the use
15 of its patent.

16 A reasonable royalty is the amount of royalty
17 payment that SimpleAir and Google would have agreed to in a
18 hypothetical negotiation taking place at a time period just
19 prior to when the infringement first began, which in this
20 case is May of 2010.

21 The damages you award are meant to compensate
22 SimpleAir and not to punish Google. You may not decide --
23 you may not include in your award any additional amount as a
24 fine or a penalty above what is necessary to compensate
25 SimpleAir for the infringement.

1 SimpleAir has the burden to establish the amount
2 of its damages by a preponderance of the evidence. In other
3 words, you should award only those damages that SimpleAir
4 establishes that it more likely than not suffered by
5 Google's infringement.

6 Now, you're going to be hearing from a number of
7 witnesses in this trial, and I want you to keep an open mind
8 while you're listening to the evidence and not decide the
9 facts until you've heard all of the evidence. While the
10 witnesses are testifying, remember that you and you alone
11 will have to decide the degree of credibility and
12 believability to allocate to the witnesses and the evidence.

13 So while the witnesses are testifying, you should
14 be asking yourself questions like this:

15 Does the witness impress you as being truthful?

16 Does he or she have a reason not to tell the
17 truth?

18 Does he or she have any personal interest in the
19 outcome of the case?

20 Does the witness seem to have a good memory?

21 Did he or she have an opportunity and ability to
22 observe accurately the things they testified about?

23 Did the witness appear to understand the questions
24 clearly and answer them directly?

25 And, of course, does the witness' testimony differ

1 from that of another witness? And if it does, how does it
2 differ?

3 These are the kinds of things that you should be
4 thinking about while you're listening to each witness in the
5 case.

6 The court reporter in front of me is taking
7 down everything that's said during the trial, but the
8 written transcription of that will not be ready in time
9 for your use during your deliberations. That's prepared
10 in case there's an appeal of this case. So because of
11 that, you're going to have to rely on your memories of
12 the evidence.

13 In a moment, you're each going to be given a juror
14 notebook. One of the things in the back of that notebook is
15 a legal pad of blank pages for you to take notes upon. It's
16 up to each of you to decide whether or not you want to take
17 notes; and if so, how detailed you want those notes to be.

18 But, remember, those notes are for your own
19 personal use. You're going to have to rely on your memory
20 of the evidence, which is why you should pay close attention
21 to the testimony of each and every witness. You should not
22 abandon your own recollection because somebody else's notes
23 indicate something differently. Your notes are to refresh
24 your recollection, and that's the only reason you should be
25 keeping them.

1 I'm now going to ask Mr. McAteer, our court
2 security officer, to hand out those juror notebooks to each
3 of you.

4 In those notebooks, ladies and gentlemen, you'll
5 see that you have a copy of the '914 patent. You'll also
6 see that you have pages with witness photographs and names
7 for the witnesses that are going to testify in this case. I
8 think that we have a page in there for every witness who's
9 going to testify. If we find during the trial that we do
10 not, we may supplement those pages, if it becomes necessary.

11 When you leave the courthouse each day during the
12 trial, I'm going to ask you to leave those juror notebooks
13 on the table in the jury room. You should either have them
14 with you in the jury box as you do now, or they should be on
15 the table in the jury room when you leave for the day. But
16 they shouldn't be anywhere else.

17 Now, it is possible during the course of each
18 day's trial we'll take a short recess from time to time, and
19 I may tell you you may leave your notebooks in your juror
20 chairs there. But other -- other than the times I give you
21 specific instructions, they should either be in your
22 possession or on the table in the jury room.

23 Now, if you'll just put those down for a second,
24 you'll have plenty of time to look at those in greater
25 detail later. I want to give you my final instructions

1 before we hear the opening statements from the lawyers.

2 Each side is going to make an opening statement in
3 just a moment. You need to understand that each side's
4 opening statement is not evidence. What the lawyers tell
5 you is not evidence. It's simply their explanation of what
6 they hope and expect that the evidence will show. The
7 evidence in this case is the sworn testimony of the
8 witnesses, together with the exhibits that are admitted into
9 evidence for your consideration. That and that alone
10 constitutes the evidence in this case.

11 As the Plaintiff, SimpleAir has the burden of
12 proof on the damages issue by a preponderance of the
13 evidence. When a party has the burden of proof by a
14 preponderance of the evidence, it means that you, the jury,
15 must be persuaded by the credible or believable evidence
16 that the claim being made is more probably true than not
17 true. This is sometimes talked about as being the greater
18 weight and degree of credible testimony.

19 We just had jury selection earlier today. I gave
20 you the illustration about the scales of justice to describe
21 the preponderance of the evidence. I'm not going to go
22 through that again. I know that you all remember that.
23 But, again, preponderance of the evidence means that a claim
24 is more probably true than not true, the greater weight and
25 degree of credible testimony.

1 Now, I want to talk to you briefly about expert
2 witnesses. When knowledge of a technical or financial
3 subject matter may be helpful to you, the jury, a person who
4 has special training or experience in that particular
5 field -- we refer to as an expert witness -- is permitted to
6 testify to you about his or her opinions on technical or
7 financial matters.

8 However, you're not required to accept those
9 opinions at all. It's up to you to decide whether you
10 believe what the expert witnesses tell you or what any
11 witness tells you for that matter and whether you believe it
12 to be correct or incorrect.

13 I anticipate there will be expert witnesses
14 testifying in support of each side in this case, but it will
15 be up to you, the jury, to listen to their qualifications.
16 And when an expert -- expert witness gives you an opinion or
17 explains the basis for it, you will have to decide what they
18 have said and whether you believe it and what extent or
19 degree to any -- if any, that you want to give it any
20 weight.

21 Now, during the trial, I anticipate that you're
22 going to be also given testimony from what are called
23 depositions. In trials such as this, ladies and gentlemen,
24 it's nearly impossible to get every witness to appear
25 physically in open court. So before the trial begins, the

1 lawyers for each side take depositions of the witnesses.

2 In a deposition, they have a court reporter
3 present; the witness is there; the witness is sworn and
4 placed under oath just as if he or she were personally in
5 court; and the parties, through their counsel, ask them
6 questions and receive their answers. And it's all recorded.
7 Portions of these video recordings of these questions may be
8 played back to you as a part of this trial so that you can
9 see the witness and hear the testimony. That deposition
10 testimony is entitled to the same consideration by you, the
11 jury, in the same way as if the witness had been physically
12 present in open court and given the same testimony live from
13 the witness stand here.

14 Now, during the course of the trial, it is
15 possible that lawyers from either or both sides will make
16 objections from time to time. And I'll make rulings on
17 those objections. It's the duty of an attorney for each
18 side of the case to object when the other side offers
19 testimony or other evidence that attorney believes is not
20 proper. Upon allowing the testimony or other evidence to be
21 introduced over the objection of an attorney -- in other
22 words, if I overrule the objection -- the Court does not,
23 unless expressly stated, indicate an opinion as to the
24 weight or effect of that evidence.

25 As stated before, you, the jury, are the sole

1 judges of the credibility of all the witnesses and the
2 weight and effect to be given to all of the evidence.
3 It's possible that objections will arise during the course
4 of the trial. If I sustain an objection to a question
5 addressed to a witness, then you must disregard the question
6 entirely, and you may draw no inference from its wording or
7 speculate about what the witness would have said if they had
8 been permitted to answer the question.

9 Some evidence may be introduced for a limited
10 purpose. If I should instruct you that a particular item of
11 evidence has been admitted for a limited purpose, then you
12 must consider it only for that limited purpose and for no
13 other purpose.

14 If I overrule an objection, you should consider
15 the question and the answer just as if the objection had not
16 been made.

17 Also I'll pause now and remind you that we have
18 work going on in the other part of the courthouse. And
19 we're probably all going to hear noises during the course of
20 this trial that don't have anything to do with what's before
21 you, the jury. But don't let that distract you, and if they
22 get too loud, I'll take a break or pause.

23 During its -- during the trial also, ladies and
24 gentlemen, it's possible that one of the parties may ask the
25 Court to seal the courtroom. This could happen if some of

1 the evidence is of a highly considerable nature or
2 proprietary to one or more of the parties or some third
3 party. In that case, if the Court orders the courtroom
4 sealed, the general public will be asked to exit the
5 courtroom and remain outside of the courtroom while that
6 considerable or proprietary information is presented.

7 Sealing the courtroom will not affect your duty as
8 jurors. You are not to draw any inferences about the nature
9 of the evidence or give it any greater or lesser weight
10 based on whether or not it was presented when the courtroom
11 was sealed or not sealed.

12 Now, the law of the United States permits a United
13 States District -- United States District Judge to comment
14 to the jury on the evidence in the case. But those comments
15 are only an expression of the Judge's opinion as to the
16 facts. And the jury can disregard those comments in their
17 entirety, because as I've told you, you, the jury, are the
18 sole judges of the facts.

19 Whether or not I have that right to comment on the
20 evidence or not, I can tell you that if I did during voir
21 dire, I am going to work very hard through this trial so
22 that you do not have any idea of what I think about the
23 evidence. That's your decision and not mine.

24 Sometimes juries have been referred to as the
25 Supreme Court of the facts, and I think that's an accurate

1 phrase. You are the sole and only persons in this courtroom
2 who, at the end of this trial, will tell us what the facts
3 are or what the facts aren't.

4 We're going to get started with opening statements
5 in a few minutes, but before we do, I want to give you a
6 brief roadmap or timeline of how the trial will be conducted
7 and what you should expect.

8 After the opening statements, SimpleAir will
9 present its evidence in support of its damages contentions.
10 Google will then, after SimpleAir rests, present its
11 evidence on the issue of damages. And after that, after
12 Google rests, SimpleAir may put on additional evidence
13 responding to the evidence of Google. That additional
14 evidence from the Plaintiff is referred to as rebuttal
15 evidence, and that portion of the case is called the
16 rebuttal case.

17 SimpleAir's rebuttal evidence may respond to any
18 evidence offered by Google. At the end of the rebuttal
19 case, when SimpleAir rests, then all the evidence will have
20 been presented at that time. Then I will give you
21 additional and final instructions in this case. Then the
22 lawyers will present their closing arguments to you, the
23 jury. After that, you will retire to the jury room to --
24 to -- to deliberate on and reach your verdict in this case.
25 Again, your verdict must be unanimous.

1 Also, to repeat my earlier instructions to you,
2 you're not to discuss the case among yourselves during the
3 trial. Only when all of the evidence has been presented and
4 I instruct you to retire to the jury room to deliberate upon
5 your verdict only then may you discuss the evidence in this
6 case among each other -- among yourselves.

7 Also, I will remind you, as I did just before
8 lunch, counsel and the parties are instructed not to
9 communicate with the jurors so if you see them or pass them
10 in the hallway, don't consider any action on their part to
11 be rude or unfriendly. They're simply doing what the
12 Court's instructed them to do by not entering into
13 conversation or discussion with you.

14 All right. I will call for announcements on the
15 record at this time. What says the Plaintiff in the case of
16 SimpleAir versus Google?

17 MR. DOVEL: Your Honor, SimpleAir is ready to
18 proceed.

19 THE COURT: What says the Defendant?

20 MS. AINSWORTH: Your Honor, Google is ready to
21 proceed.

22 THE COURT: All right. If we have witnesses in
23 the courtroom that are prepared to testify in this case, I'm
24 going to ask that all of the witnesses come forward at this
25 time and be sworn as a group. If you'll all come forward,

1 our courtroom deputy will administer the oath -- oath to
2 you.

3 (Witnesses sworn.)

4 THE COURT: All right. Does either side wish to
5 invoke the rule?

6 MR. DOVEL: Yes, Your Honor, we'd like to invoke
7 the rule, except for experts and party representatives.

8 THE COURT: All right. The rule has been invoked,
9 except as to expert witnesses or party representatives. So
10 if you are a fact witness in this case, you're not a party
11 representative or you're not an expert witness, then you
12 should excuse yourself from the courtroom at this time and
13 you'll be brought in when it's appropriate for you to give
14 your testimony.

15 Anyone that that applies to should exit the
16 courtroom at this time.

17 All right. We'll now proceed with opening
18 statements. First we'll hear from the Plaintiff.

19 Would you like a warning on your time, Mr. Dovel?

20 MR. DOVEL: Yes, Your Honor, I'd like a warning at
21 three minutes, please.

22 THE COURT: All right. You may proceed.

23 MR. DOVEL: Good afternoon.

24 A patent is property. Google is using SimpleAir's
25 patented property.

1 Now, Google's competitors, Apple and Microsoft,
2 also use SimpleAir's patent, but they paid Google for the
3 right to use those. Google has refused to pay SimpleAir for
4 the recommended patent. That's why we're here.

5 THE COURT: Mr. Dovel, let's stop just a minute.
6 It's not fair for you to have to talk over that noise.
7 We'll try to find out if that's going to be 30 seconds or 30
8 minutes.

9 Let's wait until the Court Security Officer gets
10 back and lets me know whether that's a break or otherwise,
11 because if we don't find out, then as soon as you start
12 again, it will start back. So let's wait until I hear from
13 the Court Security Officer.

14 MR. DOVEL: Yes, Your Honor.

15 (Pause in the proceedings.)

16 THE COURT: All right. Mr. Dovel, let's try
17 again. You've used about 30 seconds.

18 MR. DOVEL: Thank you, Your Honor.

19 Mr. Eichmann pointed out that I had misspoke when
20 I started. I said that Apple and Microsoft paid Google.
21 What I should have said is that Apple and Microsoft paid
22 SimpleAir for the right to use SimpleAir's patents. And
23 we're going to prove to you how much Goggle should pay to
24 SimpleAir, and I'm going to do that using real world data,
25 real world data showing you how much more Google infringes

1 than its competitors. How much Google's Android users value
2 the notification service based on real world data and real
3 world data showing you how much additional profits Google
4 has earned as a direct result of using SimpleAir's
5 invention.

6 This data -- this data is going to be presented to
7 you by some top experts, and it's going to show you that the
8 royalties due to SimpleAir up through the end of last year
9 total between \$126 million and \$146 million.

10 Now, to get started, I want to tell you a little
11 bit about how Google uses SimpleAir's invention, just so you
12 have an overview of it.

13 This I've placed on the screen is a Google Android
14 phone, and what that means is it's -- it's a smartphone. It
15 has a computer inside of it that runs Android software --
16 Google's Android software. And on this Android software,
17 people can install apps, such as the -- this is an app for
18 ESPN, The Weather Channel, and CNN. And what's particularly
19 useful about these apps is that people can get notifications
20 about relevant information that relates to the app. For
21 example, here is a notification about a just completed
22 basketball game. That's from ESPN. Here's an example of a
23 weather alert from weather -- the weather channel. Here's
24 an example of a breaking news story from CNN about this
25 missing airliner and the latest news on that.

1 Now, the way that those notifications appear on
2 all of the Android phones is by using SimpleAir's patented
3 method. Google uses it. I've placed on the screen Claim 1.
4 That's one am of the claims that Google infringes, and it's
5 a method for providing notifications to -- to computer
6 devices. And it makes use of something called a central
7 broadcast server.

8 And let me just explain to you a little bit about
9 the patented central broadcast server method that Google
10 uses. The way it works is this. We have an example here of
11 CNN. They're an information source. And they've got
12 information that they think that this particular phone would
13 like -- user would like to get. But they don't have any
14 connection with that user. So they've got the story, an
15 update on this Malaysian airliner, but they don't have any
16 way to get it to the user directly. Well, what CNN can do
17 is they can make use of Google's Cloud Messaging Service.
18 This is a service that Google provides so that Android users
19 can be updated with additional information. This is
20 Google's central broadcast server.

21 Now, you're going to learn that there are two
22 infringing systems that Google has. This is one of them,
23 GCM. This is one they started in the middle of 2012 after
24 the lawsuit was filed against them. The -- they had another
25 one, C2DM, that they used before the lawsuit was filed

1 against them, but both of them infringe the patent.

2 Now, the way this works is CNN can send this
3 notification over to Google's system and then Google's
4 system can transmit, process, and address it. Why? Because
5 Google's system has a connection to this phone, a persistent
6 connection. So using this central broadcast server method,
7 even though CNN doesn't -- is not connected with the user,
8 the user doesn't -- is not connected to CNN, the user can
9 get information from CNN. In this case, here's the update
10 about Flight 370.

11 Now, Google doesn't just use this for CNN. They
12 use it for thousands of apps and for millions of Android
13 users for billions of notifications, literally over a
14 billion notifications per day. In the time it takes me to
15 say this sentence, Google infringes the patent over 100,000
16 times. They are a big infringer. The biggest infringer
17 around.

18 Now, we're also going to show you that Google
19 makes money from using SimpleAir's invention. Google and
20 its witnesses are going to tell you that Google doesn't make
21 any money. In fact, we give away this Android software for
22 free. We give away this notification service for free. We
23 don't charge anybody for it. But we're going to show you
24 that Google makes a lot of money from Android users. It
25 gives away the software for free, but that's because it

1 sells a lot of things to those Android users.

2 One of the things it sells is advertising that
3 appears on every Android phone. It sells apps for Android
4 phones. It sells music and moves digital downloads. It
5 even sells Android phones. From all the Android revenues
6 that it collects, it amounts to billions and billions of
7 dollars. Last year alone, more than \$4 billion in just one
8 year, and they've been doing this for several years.

9 Now, we're also going to show you that the way
10 they collect this revenue is by having Android users. Every
11 time there's Android phone in use, Google can make money
12 from it. That's how they make money. The more Android
13 phones are in use, the more Android users, the more Google
14 Android revenues there are. We're going to prove that to
15 you, and it will be undisputed.

16 So what does that mean here? That means that if
17 we -- that means that from Android users, Google makes a lot
18 of money. They're not simply just somebody who gives away
19 software, charges nothing to the user, and makes no money.
20 They make billions of dollars, and a good chunk of that, not
21 all of it, not even most of it, but a good chunk of it is
22 directly the result of using our infringing notification.

23 Let me explain to you why that is, why the
24 notifications were so important. This is a chart that shows
25 the growth in the -- in the use of notifications over time.

1 When notifications were first introduced, there were only
2 available on a few apps and there were only a few users.
3 But over time, more and more people began to understand the
4 unique advantages of these notification apps. Information
5 would come for -- come to them without them having to search
6 for it, and it could come to them in a timely manner, within
7 seconds of the information being available. And more and
8 more people found that notification apps were very important
9 to them.

10 By 2012, most Android users had at least one
11 notification app, and 20 percent of Android users had 6 to
12 20 different notification apps. Notifications became very
13 important for many social media apps like Twitter and
14 Facebook and Instagram where providing the instant
15 information was really important to many users.

16 Now, we're going to show you that it was very
17 important for Google to provide this notification service
18 because Google has competitors. Google sells Android
19 phones, but it competes with others. It competes with
20 Apple, Microsoft, and Blackberry. All of Google's
21 competitors, all three have their own app notification
22 service -- an app -- an app notification service that makes
23 use of SimpleAir's patented invention.

24 For Google to be competitive, it needed to also
25 provide an app notification service. If there's an Android

1 user -- and there are many of them that think notifications
2 are very important. And if Google did not have app
3 notifications available to them, many of them would switch
4 and use a different phone -- not all of them, not even most
5 of them, but a large percentage of them would. That means,
6 remember, the more Google phones, the more Android phones in
7 use, the more Google profits. Without notifications, fewer
8 Android phones in use, fewer Google profits. Use of
9 notifications directly added to Google's profits.

10 We're also going to provide you specific evidence,
11 based upon real world data, about how much additional profit
12 Google earned just from using our infringing system. This
13 is -- this is profit they earned, not from all the other
14 good things about Android, the profit that's directly
15 attributable to just the notifications using our infringing
16 system that they would not have received if they didn't have
17 the access to our patent.

18 Now, how are we going to do that?

19 Well, Google, as we said, they don't charge a
20 separate fee for this notification service. And so in order
21 to figure out what Google's additional profits are from that
22 service, we have to use something called conjoint analysis.
23 And conjoint analysis, it's a consumer survey technique
24 that's used by major companies when they want to find out
25 how much extra profit they can expect to get when they add a

1 new, important feature to a product or service. They want
2 to figure out how much extra profit they could get. So it's
3 used by real-world companies every day, more than 10,000
4 times a year.

5 We're going to present to you Dr. Seenu
6 Srinivasan. He's a Stanford professor. He's a consultant
7 for major companies, and he is one of the world's leading
8 experts on conjoint analysis.

9 Now, he did a detailed study that made use of data
10 from real-world smartphone users, and based on his conjoint
11 analysis, which he'll explain to you, he determined that on
12 average, the market willingness to pay for this notification
13 feature, if it were sold separately, would be about \$12, a
14 little more than \$12, and about 42 percent of Android users
15 would purchase it at that price.

16 Now, those numbers may not seem like very much.
17 They may seem like they're not that big, but there are so
18 many Android phones in use in the United States that it adds
19 up real fast. In fact, we'll show you that as a result of
20 this, Google made a billion dollars -- just under a billion
21 dollars in additional revenue as a result of the
22 notification system. About \$600 million in additional
23 profits, profits they would not have earned but for using
24 SimpleAir's patented invention. Extra money.

25 \$600 million is a lot of money, and for Google

1 it's a lot of money too, but it's just a fraction of what
2 they get from Android revenues. And this is the fraction
3 that's attributable to just using our invention.

4 Now, we're going to show you that Google had to
5 use the '914 invention to provide these notification apps.
6 There's a reason why all of its competitors use the '914
7 patent, and there's a reason why Google did. And that's
8 because there isn't an alternative that's acceptable.

9 We're going to present to you the testimony of Dr.
10 James Knox, and he'll explain to you why any alternative way
11 of trying to provide notifications would have had
12 consequences and wouldn't be acceptable. For example, there
13 are other methods that could be used, but they cause a drain
14 in the battery life of the phone that's unacceptable so you
15 can't use them.

16 Now, we're also going to show you that Google's
17 own expert admits that there's no good alternative to using
18 the '914 patent to provide notifications to smartphones.
19 You've got to use the SimpleAir central broadcast method.

20 THE COURT: Three minutes, Counsel.

21 MR. DOVEL: Thank you, Your Honor.

22 In addition, we're going to present the testimony
23 to you of economist Robert Mills. He's an expert in
24 applying economic principles to determine royalties, and he
25 will explain to you based on the data why a reasonable

1 royalty would be about 93 cents per Android phone and why
2 that would total about \$146 million.

3 The last topic I'm going to discuss with you here
4 in my final two minutes is the additional evidence from Mr.
5 Mills, the economist. He's going to discuss SimpleAir's
6 patent licenses for you. He'll place them on the boards
7 here. You'll get to hear more about them in the trial.
8 But they fall into two groups. There's the -- the orange
9 group and the green group. The orange group, they paid
10 SimpleAir a lot less money for a license. The green group
11 paid a lot more. Up to \$30 million was paid by Apple.

12 Now, Google says, well, we think we should be
13 compared to the orange group; that we think we're comparable
14 to those, so compare us there. And we agree that Google is
15 the biggest infringer around. We should pay much more than
16 anybody else, but compare us to the orange group. Compare
17 us to Facebook and Yahoo.

18 And we say that Google should be compared to Apple
19 and Microsoft, its competitors, and that it should also pay
20 more than anybody around.

21 To show you which group they should fall in, we're
22 going to show you that they need to be compared -- Google
23 needs to be compared to other companies that do the same
24 thing, that provide an app notification service. They get
25 benefits from the patent by providing this service. Those

1 companies are Apple, Microsoft, and BlackBerry. The
2 evidence is going to show you that the others do not. They
3 need to be compared to Apple and Microsoft.

4 What happens when we do that comparison, Google
5 uses a lot -- the invention a lot more than anybody else,
6 about 5 times more than Apple, about 40 times more than
7 Microsoft.

8 Mr. Mills will explain why we make the appropriate
9 adjustments to account for the -- the relative use and the
10 differences between these companies that while Microsoft
11 paid 7.25 million and Apple paid 30 million, based on this
12 comparison, Google should pay at least \$127 million.

13 You'll see evidence based upon real-world data,
14 hard facts, including Google's own documents, that Google's
15 damages are between 127 and \$146 million.

16 Thank you.

17 THE COURT: All right. The Defendant may offer
18 its opening statement.

19 Mr. Stockwell, would you like a warning on your
20 time?

21 MR. STOCKWELL: Yes, Your Honor, three minutes.

22 THE COURT: All right. You may proceed.

23 MR. STOCKWELL: Mr. Barnes, could I have the
24 screen?

25 Good afternoon. I want to thank you for your time

1 and attention in advance. You're here to help the parties
2 resolve the last part of their dispute, the damages part.

3 You already know that the first jury was not able
4 to reach a verdict on the damages issue. And you're going
5 to hear a lot of the same evidence that that first jury
6 heard and ultimately decide the amount of money that Google
7 owes SimpleAir for using the '914 patent.

8 Now, at this point of the dispute, we don't
9 dispute that we owe SimpleAir money, but we sure dispute how
10 much money we owe SimpleAir. That's the issue that you're
11 being asked to resolve.

12 Now, for you to decide that, you have to determine
13 what's fair and reasonable to both parties, because the
14 award in this case is a reasonable amount of damages, a
15 reasonable royalty. And the Judge already told you about
16 the hypothetical negotiation that has to occur.

17 The other issue you have to keep in mind is that
18 under the patent laws, you can be liable for infringement,
19 even if you didn't know about the patent. So in the trial
20 establishing that Google infringed, there wasn't even an
21 allegation that Google had copied the patent or willfully
22 infringed the patent. That's not the situation here.

23 In fact, Google independently developed its
24 messaging service. And you heard Judge Gilstrap tell you
25 this morning that this trial is to determine damages in the

1 form of a reasonable royalty and that the damages are not to
2 punish Google. And that makes sense. That's the law, but
3 it's also common sense. You don't punish someone who has
4 not done anything intentionally wrong.

5 Now, what is the evidence going to show about
6 damages?

7 One of the things that I -- I think you have to
8 keep in mind is that the damages here is for the use of the
9 patent, and what infringes is the Google messaging service.
10 Google thinks the evidence is going to show that the
11 reasonable damages in this case are \$6 million.

12 And we don't think that SimpleAir can meet their
13 burden of showing the real-world evidence of damages of 145
14 to \$160 million. We don't think they're going to be able to
15 prove that. We don't think the damages are anywhere close
16 to that.

17 Now, there's a big difference between the parties.
18 We spent a lot of time this morning picking a fair and
19 impartial jury. Google trusts that you'll be able to get to
20 the right number and do justice to both sides and listen to
21 the whole story, not just SimpleAir's side of the story.

22 I want to preview Google's side of the story, talk
23 a little bit about Google and its business model and Google
24 messaging service.

25 If you could put up Slide 1, Mr. Barnes.

1 Google began when Mr. Page and Mr. Sergey Brin had
2 met at Stanford. They were two students. They set up shop
3 and they created a search engine. You can see the search
4 engine that Google created today.

5 Those search -- those search engines, all the work
6 they did, they supported that by charging advertisers. So
7 when you go search, you sometimes see a screen next to your
8 search result that tell you some folks that might want to
9 sell you something. That's an advertisement. That's how
10 Google makes money. They don't charge consumers.

11 Over time, Google hired hundreds of engineers and
12 they came out with new products. You can see many of them
13 there. They've got the Gmail email service Gmaps, YouTube
14 video. And they also introduced something called the
15 Android operating system that's used on mobile phones.
16 And you heard Plaintiff talk about that a little bit. I
17 want to talk about some of the Android features. Since
18 2008, when they introduced Android, they've introduced
19 multiple versions and hundreds of features of Android. What
20 Plaintiff didn't allege and what you're not going to hear in
21 this trial is that Android infringes.

22 Android doesn't infringe. The Android features
23 that are shown there are things that Google developed that
24 are entirely separate from this '914 patent. Android is
25 distributed as a free and open source technology. It's

1 freely available to everybody. Google doesn't charge for
2 it. It's the fact that it was free and the fact that it has
3 all these features that made it successful.

4 So where did the Cloud Message -- the Google
5 Cloud Messaging service come in and how does that really
6 relate to Android?

7 Well, you know that smartphones have applications,
8 apps. And apps can be the games. They can be the social
9 networking sites, like Facebook. They can be the weather
10 site, like Mr. Dovel just showed you. Those are apps. You
11 can get news; you can get content.

12 An app is just one feature that an Android phone
13 offers. For example, if someone comments on your Facebook
14 wall, you can receive an app on that. After Android had
15 been introduced and was already successful, Google
16 introduced the messaging service in June of 2010. And what
17 that messaging service did -- and you'll hear about this
18 from Mr. Manolache, one of Google's witnesses -- was allow
19 app providers to send messages to an app on an Android
20 phone.

21 The service was a way that they could just send a
22 little short ping to the phone. Facebook uses it; Twitter
23 uses it; LinkedIn can use it; all sorts of app providers do
24 it. They all do it for free.

25 And today, that Google messaging service over 90

1 percent of the billions of messages a day that it delivers
2 are delivered to those free apps as initiated by those app
3 providers. So we just deliver those messages that they ask
4 us for. We don't charge the app providers, and we don't
5 charge the users.

6 So how did we get to this situation?

7 Well, these notifications, they're just one
8 feature in an app. So if you're getting -- if you're
9 playing a game in an app, it's just one feature that you
10 might get a notification in the game. The app is just one
11 feature in Android. After we had already introduced the
12 Google messaging service, about two years after that, we got
13 sued by SimpleAir.

14 Google hadn't heard of SimpleAir. Hadn't heard of
15 the patents. We started looking into it. What we found is
16 that a company, AirMedia, had owned the patent, and they had
17 actually built a system under the patent. They tried to
18 make a go of that business. They tried to charge for
19 notifications. It didn't work. They went bankrupt. People
20 would sign up for a trial subscription, but once they
21 started paying for it, they didn't want to pay for the
22 notifications.

23 So they borrowed some more money from a company
24 called Verus. They made another go of it. They went
25 bankrupt a second time. Even though they were using the

1 '914 patent, people just didn't want to pay for those
2 notifications.

3 Verus, the bank that loaned AirMedia money, they
4 got the patents out of bankruptcy, and they got about 20
5 patents and patent applications, including the '914. And
6 SimpleAir later acquired those patents from Verus. You'll
7 hear them explain, Mr. Payne and Mr. von Kaenel. They
8 formed SimpleAir. They went to Verus. They bought the
9 patents. They didn't pay any cash.

10 What they did is they agreed to share some of any
11 damages or royalties they could collect with Verus.
12 Actually created a product, marketing it, supporting it,
13 hiring engineers. That's -- that's kind of risky. You've
14 got to spend a lot of money on it. It might fail. They
15 knew that, because AirMedia had failed. They didn't want to
16 take that risk. They don't create products. They don't
17 have a lot of employees.

18 Their plan was to license and enforce the patent,
19 and that's what we think is the real-world evidence. The
20 licenses they granted. And if you look at some of these
21 licenses, they didn't talk much about the amounts here.

22 When SimpleAir started licensing the patents, they
23 started with AccuWeather, about \$22,000. They went up to
24 Verisign, about 500,000.

25 All of these licenses were for about seven

1 patents.

2 If you go to the next slide, Mr. Barnes.

3 They also licensed Yahoo!, Facebook, Microsoft,
4 RIM, and Apple. And there is a dispute. We do think we are
5 more like Yahoo! and Facebook than we are about Microsoft,
6 RIM, and Apple.

7 Before we talk about that reason, I just want you
8 to step back and think a little bit about what the damages
9 demand is in this case, and you'll see that they've got
10 about 13 licenses. They've had about a total of \$45 million
11 in revenue. And they're saying they get 4 times that much
12 from just Google.

13 We don't think that makes any sense. We don't
14 think that's reasonable. And when you dig into these
15 licenses, we think you're going to see that Yahoo! and
16 Facebook licenses are the most relevant.

17 Yahoo!'s like Google. It has a search engine.
18 Yahoo! makes money from advertising. Yahoo! offers
19 software, email, and apps for free just like Google. Yahoo!
20 paid \$800,000 for 6 patents.

21 Facebook paid SimpleAir \$900,000. They got a
22 license to the '914 patent and 6 more patents. Facebook
23 makes most of its money from advertising, and it also offers
24 software and free apps. And you're going to learn that
25 those 14 billion messages they mentioned, 40 percent of

1 those are Facebook messages that we deliver. So the very
2 messages that Facebook generates under this license, we
3 transmit on and send on to the -- to the end users. We
4 think that makes Facebook very relevant and the most
5 relevant in this case.

6 You're going to hear from Dr. Ugone. He's our
7 economic expert. He analyzed these licenses, and he
8 analyzed licenses from Google where they took licenses up to
9 \$5-and-a-half million for similar patents. He adjusted all
10 of these licenses and he concluded that \$6 million is the
11 reasonable damages in this case.

12 What about the Microsoft, the RIM, and the Apple
13 agreements that SimpleAir mentioned?

14 If we can go to the next slide.

15 They -- they showed you a slide about which phone
16 will the user choose. And one thing that they didn't
17 mention is that Apple and RIM, you know, they -- they make
18 and sell smartphones. We think Apple and RIM are different
19 from Google.

20 When you go to a Verizon store and you buy an
21 iPhone, Apple makes money or RIM makes money, if you buy a
22 BlackBerry phone. When you buy a Samsung phone in that
23 store or a Samsung phone that runs our free operating
24 software, Google doesn't make money from that sale on that
25 store.

1 There's another huge difference between Google and
2 Apple. They -- they said that Google had made billions in
3 Android revenue. What they didn't tell you is that Apple in
4 just 2012, they made \$80 billion selling 50 million iPhones.
5 Their revenue in just 2012 was 40 times larger than Google's
6 Android-related revenue.

7 And yet they say, oh, Google has to pay 5 or 6
8 times more than Apple did, which made 40 times more money.
9 That makes no sense.

10 SimpleAir accuses Google's messaging service that
11 provides free notifications to mostly free apps running on
12 the free Android system. They say -- it says we should pay
13 millions of dollars in royalties for phones sold by other
14 people, and now they're saying that's real-world evidence.
15 I don't think -- I want you to listen carefully when you
16 hear Dr. Srinivasan's testimony about what they just
17 characterized as real-world evidence. He went out and did a
18 survey, and he said, well, people would pay \$12 for the
19 phones with these notifications.

20 THE COURT: Three minutes, Counsel.

21 MR. STOCKWELL: Thank you, Your Honor.

22 And they came up with this theory that Google
23 should have charged for notifications. That's not
24 real-world evidence. That's make-believe. That's imaginary
25 revenue that they've come up with.

1 And the fact that they characterize it as
2 real-world evidence today, I want you to listen carefully
3 when you listen to that part of the evidence and think about
4 whether that's real or imaginary. We think it's imaginary.
5 And the revenue theory doesn't make sense. It requires
6 Google to change its business model and charge consumers \$12
7 for notifications. You're going to hear Mr. Gold. He's
8 going to explain Google's business model. He's going to
9 explain that it's successful because Android has hundreds of
10 features and are offered for free. The '914 patent doesn't
11 cover Android and the many features of Android.

12 If you'd go to the next slide, Mr. Barnes.

13 57 percent of all the apps are free, and 80
14 percent -- over 80 percent of the notifications Google
15 delivers are for free apps. The notion that we would
16 hypothetically change our business model and charge for apps
17 makes no sense. When AirMedia tried it and they went
18 bankrupt, none of the other companies SimpleAir licensed
19 charged for notifications.

20 I want to talk a little bit about Microsoft. What
21 about them?

22 You heard that comparison with the Microsoft
23 agreement where they multiply Microsoft's payment by 40
24 times to try to get to a Google number. That's based on
25 Microsoft having less notification messages than Google.

1 Again, when you look at the real-world evidence,
2 you're going to see that Microsoft didn't pay any money
3 based on the number of notification messages. When you
4 bought your computer that sends emails, you didn't pay based
5 on how many emails it can send and receive. You bought the
6 equipment and paid one price.

7 Every single one of these license agreements
8 you'll see from SimpleAir, one payment for multiple patents
9 and for far more years in terms of a license to use those
10 patents than they're proposing for Google.

11 Finally, you're going to hear about something
12 called a non-infringing alternative. The Judge will
13 explain that. And that refers to whether Google could
14 have implemented an alternative service that avoided
15 infringing the '914 patent. If it had, the cost of the
16 alternative limits what the damages could be.

17 And you're going to learn that Google had such an
18 alternative. It has data centers all over the world. In
19 order to infringe this method patent everything has to be
20 done in the U.S. It could have put the servers outside the
21 U.S. It would have cost about 4.8 million bucks.

22 4.8 million, 150 million, which one would we have
23 done? We would have chosen the 4.8 million. That's why \$6
24 million is the reasonable damages in this case, not the 145
25 million that they're claiming.

1 THE COURT: Time's up, Counsel.

2 MR. STOCKWELL: Thank you, Your Honor.

3 THE COURT: Counsel, approach the bench, please.
4 (Bench conference.)

5 THE COURT: Mr. Stockwell?

6 MR. STOCKWELL: Yes, sir.

7 THE COURT: There's an order in limine against
8 evidence or argument on lack of prefiling notice or
9 willfulness. You talked directly about that in your
10 opening.

11 MR. STOCKWELL: But, Your Honor, there was also --
12 you said we could actually talk about the fact that Google
13 independently developed, and you also said, Your Honor, that
14 you were going to instruct the jury on that issue.

15 (Noise interference.)

16 MR. STOCKWELL: Your Honor, the other thing is I
17 said Google didn't talk about the patent.

18 THE COURT: You talked about there will be no
19 willfulness in the prior suit.

20 MR. STOCKWELL: Yes, Your Honor. As I understood,
21 the Court was going to actually charge the jury on that.
22 That was a joint construction on both sides on the final
23 instructions, and that was agreed to in a stipulation.

24 THE COURT: Well, what I'm going to charge them on
25 and what you're bound by in the in limine order are two

1 different things. I want you to be particularly careful.

2 MR. STOCKWELL: Yes, sir. I'm sorry. I thought I
3 was.

4 THE COURT: That's all right.

5 (Bench conference concluded.)

6 THE COURT: All right. Is the Plaintiff ready to
7 call its first witness?

8 MR. EICHMANN: Yes, Your Honor. We call Dr. James
9 Knox.

10 THE COURT: All right. If you'll come forward,
11 Dr. Knox.

12 All right. Mr. Eichmann are you ready to proceed?

13 MR. EICHMANN: Thank you, Your Honor.

14 JAMES M. KNOX, Ph. D., PLAINTIFF'S WITNESS, PREVIOUSLY

15 SWORN

16 DIRECT EXAMINATION

17 BY MR. EICHMANN:

18 Q. Good afternoon, Dr. Knox.

19 A. Good afternoon.

20 Q. Sorry I interrupted you. Do you need to pour yourself
21 some more?

22 A. It's hot back there.

23 Q. It's hot up here, actually.

24 Can you introduce yourself to the jury, please, and tell
25 us why you're here today?

1 A. Yes. My name is Dr. James Knox. And I've been asked to
2 come back today and just give you an extremely brief
3 overview of the -- the technical aspects of -- of the '914
4 patent and how GCM uses it.

5 Q. GCM is a reference to Google's infringing service?

6 A. Google Cloud Messaging, yes, the service that infringes
7 the patent. Actually, there's two names. C2DM is the other
8 one.

9 Q. Were you also called to testify in the last trial that
10 happened in this past January?

11 A. That's correct. I was here in January upstairs in that
12 courthouse.

13 Q. And what was the subject of that testimony?

14 A. That was from my standpoint infringement of the '914
15 patent by the Google GCM and the C2DM, the Cloud to Device
16 Messaging. And also testified on the validity aspects of
17 the '914 patent.

18 Q. Did the jury agree with your opinions on those issues?

19 A. Yes, on both, unanimously.

20 Q. We won't get back into all the details of that, but I
21 just wanted, as you pointed out, to go briefly through some
22 of the background here starting with the invention.

23 MR. EICHMANN: Is that actually up on the screen?

24 THE WITNESS: Not that I can see.

25 MR. EICHMANN: All right.

1 Q. (By Mr. Eichmann) All right. So these are the three
2 background topics we're going to start with, including the
3 invention.

4 Now, when did the invention in this case happen?

5 A. The date that I've seen is January of 1996.

6 Q. And where was the invention made?

7 A. The company called AirMedia, you've heard mentioned
8 earlier, Mr. John Payne and Tim von Kaenel were inventors
9 there who developed the -- the technique, the central
10 broadcast server.

11 Q. And Mr. Payne and Mr. von Kaenel are here today?

12 A. That's correct.

13 Q. What's their relationship to SimpleAir?

14 A. They, as I understand it, formed SimpleAir. They were
15 the inventors of the '914 discovery, the '914 patent, and
16 they -- they reclaimed their invention.

17 Q. Tell us a little bit about what the technical world was
18 like in 1996.

19 A. Well, '96 was approximately the same time that what had
20 been called ARPANET went public so that anybody who wasn't
21 military or university could start using it. It was just
22 beginning what obviously was a meteoric rise in usage.
23 There were a lot of different ways that you could go out and
24 try to find information on it. They were limited, and you
25 had to do it. It wasn't easy to find.

1 And at that time, people were paying a large amount of
2 money for connection to the Internet. I think I started at
3 \$60 an hour, basically a dollar a minute just to be
4 connected to -- to do a search or to look for something.

5 Q. Can you tell us what's shown on this slide?

6 A. That's one of the very early indexing schemes that
7 Yahoo! used, and you can see the small numbers there. It
8 gives you an idea how early this was. They basically broke
9 up different pieces of information by different categories:
10 Business, computer, art. Again, this is very early on.

11 Q. And at this time, when people wanted to get on their
12 computers and get information from sources of information,
13 like CNN and The Weather Channel, how did they go about
14 doing that?

15 A. Well, as you say, we had these information sources.
16 They were on the Internet, what we call online to the
17 Internet. And you could go to these. Today we call it
18 pull. You could go to these and try to pull down
19 information. So if you wanted to know today's weather, you
20 logged in; you went to The Weather Channel's Internet
21 connection, and you searched and pulled down that
22 information. Same for CNN, ESPN.

23 Q. And generally, can you tell us what the invention was
24 about? How did that differ from the conventional way?

25 A. Well, the problem with that, going to the sites and

1 pulling down the information is you had to -- first off, you
2 had to know there was something there to pull down. The
3 example of the -- of the Malaysian airliner, you wouldn't
4 search for information on it if you didn't know there was an
5 issue.

6 What the invention did was it turned this whole thing
7 around the other way so that these information sources, when
8 they realized there was a piece of information that you had
9 previously indicated to them you would be interested in --
10 doesn't matter if it's Malaysia Airlines or a football
11 score, they sent that information out.

12 They couldn't send it to you. They sent it to a
13 central broadcast server. That central broadcast server
14 knew how to send these -- what we call these instantaneous
15 notifications, these alerts that say, hey, there's an
16 airliner missing. If you were interested, you could get
17 more information in conventional ways or other ways.

18 Q. So this shown here on the slide, does this generally
19 depict what they came up with?

20 A. Yeah. This is what we call push in today's terminology.
21 The information is pushed to you. You don't even need to
22 know that there's information out there that you need to be
23 aware of. Like a tornado alert the -- The Weather Channel
24 can tell you that there's a tornado alert.

25 Q. And what about this arrow that's now depicted on the

1 left side, can you tell us what you're trying to convey with
2 that?

3 A. Well, at the time of the invention, this was very, very
4 important. You didn't have to be online to one of these
5 information sources to get this information. You could be,
6 but you didn't have to be. You didn't have to be sitting
7 there hour after hour paying a dollar a minute just to find
8 out that there might be a tornado alert.

9 Q. What were some of the other advantages of this way of
10 doing things over the way it existed before?

11 A. Well, in addition to the monetary issue, the main
12 thing -- the main next advantage was that, again, you would
13 find this out without asking for it. You indicate that
14 you're interested in a particular type of information, and
15 when that information -- something in that category is
16 available, it was pushed down to you.

17 You got an alert on your computer. These were desktop
18 computers at the time, and it would pop up. Even if your
19 computer wasn't online, it would give you this notification,
20 and then you still made the final decision whether you
21 wanted more information or it was something you didn't care
22 about.

23 Q. Now, how does all this relate to the patent in this
24 case?

25 A. Well, as -- as common, when you have an invention,

1 you -- you get patent protection on it. This is the rights
2 to use your invention or to license it to other people.
3 What you see here is a claim, and that's -- what you heard
4 this morning is just a part of a patent that kind of
5 delineates the ownership, the boundaries of your
6 intellectual property.

7 This is Claim 1. This is the primary independent claim
8 that sets out those boundaries under what is called the '914
9 patent.

10 Q. And is the patent limited to use the invention to
11 computers like the one that's on the screen?

12 A. No. It's limited by the scope and language of the
13 claim. The claim can be much broader than what they call
14 the specific embodiment, which was the way it was used by
15 AirMedia. That was simply an implementation of one form of
16 that property.

17 Q. Does -- does the patent cover using the invention for
18 smartphones and other types of computers like the tablets?

19 A. Yes. You have to read the claims. It covers whatever
20 that says. AirMedia, in fact, had plans for that. This is,
21 I believe, an advertising that came out at the time. And it
22 shows it with handsets, essentially wireless telephones, but
23 also shows it with notebook computers, Palmtops. This Palm
24 Pilot thing here is, again, what we would call a tablet
25 today.

1 Q. And this is Exhibit 98?

2 A. Yes, that's correct.

3 Q. Now, let's turn to the infringing Android service in
4 this case. I'd like you to explain a little bit about that,
5 and I'd like you to start with the Android operating system.
6 Can you tell us what the Android operating system is?

7 A. Yes. There's really two things, first off. There's
8 what people kind of refer to as the Android system, and then
9 there's the kernel of it. What really is a computer person
10 I think of as the operating system.

11 And those are the instructions that reside within that
12 phone that tell that phone exactly step-by-step how to do
13 what it does. If you didn't have that in there, the screen
14 wouldn't even light up. It would never -- well, it wouldn't
15 even make a phone call. It certainly wouldn't get on the
16 Internet.

17 If you didn't have this Android operating system or
18 some equivalent operating system in there, it would just be
19 an expensive paperweight.

20 Q. Let me back up for a moment. How do you know about all
21 this stuff? What's your area of expertise?

22 A. I -- I designed my first operating system back in the
23 1960s at the University of Texas. And I have a small
24 research and development company there in Austin. Part of
25 our bread and butter is microprocessors, like are what are

1 in these smartphones, and designing both the hardware and
2 the operating system software for these.

3 In fact, we have our own operating system that TriSoft
4 developed that we put in most of our products.

5 Q. And can you tell us a little about your educational
6 background, your formal training?

7 A. As I have this gray hair, I'm old. And so I've been
8 through a lot of it. I have a bachelor in electrical
9 engineering. I have a master's in computer science. I have
10 a doctorate in electrical engineering with also a
11 specialization in biomedical engineering.

12 I've worked with the -- the Department of Defense,
13 Department of Homeland Security, major companies and
14 governments all over the world. And we have designed both
15 commercial and civilian and military systems. Literally, as
16 I told one person from -- we've designed systems from
17 submarines; we've designed systems for deep space.

18 Q. And how much time have you spent looking over the Google
19 documents and the computer code for Android in this case?

20 A. Way more than I ever wanted to. I couldn't give you an
21 hour number, but it's been many, many months of work.

22 Q. Let's turn back to the Android system. And now, let's
23 talk about how they infringe.

24 What is it that Google is doing that infringes on
25 SimpleAir's patent?

1 A. Well, the first part to notice here of this -- this
2 slide is that we've still got exactly what we had before.
3 We've got our information sources, and they're sending these
4 messages to a central broadcast server.

5 What Google's done is put in their own central
6 broadcast server. The C2DM or THE GCM is a set of
7 computers, a huge bank of them, with a big set of software
8 that does what a central broadcast server does under the
9 patent.

10 Q. And is there any difference between this and what
11 AirMedia's original idea was?

12 A. No, not really. The central broadcast server, just like
13 with AirMedia, pushes these notifications out. The only
14 real difference is at the time of AirMedia, they were
15 primarily going to desktops.

16 Now, the big use -- you still could use it to a
17 desktop, but the big thing for Android is these tablets and
18 these smartphones.

19 Q. And can these notifications come in through the Google
20 system, even if they don't have a connection -- the phones
21 don't have a connection to the information sources?

22 A. Just like with -- with AirMedia or just like the '914
23 patent, you can have this connection certainly and it
24 certainly works, but you don't have to have it. You will
25 get the notification whether you're sitting there connected

1 to The Weather Channel on your phone or not.

2 Q. You mentioned the names of these services. There's --
3 there's two names; is that right?

4 A. That's right. It's actually, I think, three now, but
5 Android Cloud to Device Messaging, C2DM, is the acronym
6 everybody uses, was the original in 2010, and then later,
7 they came out with upgrade to it called GCM, Google Cloud
8 Messaging.

9 Q. Did the second version, the second service you just
10 pointed to, come out after this lawsuit was filed against
11 Google?

12 A. That's my understanding, yes. That, I think, was in
13 2012. The lawsuit I believe was filed in 2011.

14 Q. And when the lawsuit was filed, Google didn't stop
15 infringing?

16 A. That's correct. They developed and rolled out that code
17 after the lawsuit.

18 Q. Well, let's walk just through a couple of examples of
19 this.

20 What do you -- what do you have here on this screen?

21 A. As I say, these are examples. Gmail is Google's email
22 server. It -- when you get an email on the Gmail -- and
23 this is the Gmail server. This isn't your phone. This is
24 when that email arrives there at the machine that hosts that
25 email. It sends a message to the central broadcast server.

1 The central broadcast server sends this notification to your
2 phone, and you get a little pop-up that -- an alert that
3 says basically you have mail. You know, So-and-So just sent
4 you email. It's just little piece of information, not the
5 whole message.

6 If you want to see more, you can do something with that
7 alert. Slide it, tap it, depends on the phone you have, and
8 pick up your actual mail.

9 Q. And briefly, sir, we have two more examples. What's
10 the -- the second one here?

11 A. Weather Channel, kind of a very important one -- though
12 hopefully not as common -- sending out things like severe
13 weather warnings, exactly the same deal, though. It lets
14 the central broadcast server know, which lets your phone
15 know, which lets you know.

16 Q. And this third one?

17 A. Facebook, same sort of deal. I think it was mentioned
18 earlier somebody posts something to you on Facebook and
19 rather than you having to check back every few minutes to
20 see if somebody's done this, you get this little pop-up
21 through the central broadcast server, through Google's
22 system.

23 Q. Google produced records in this case about its use of
24 the service. Did you have the opportunity to review those?

25 A. For what they produced, yes, I have.

1 Q. And what did the records show about how many of these
2 messages are going out on a daily basis?

3 A. This is worldwide, which is the only information I have
4 here. July 9th, 2013, and it's 14 billion of these
5 messages.

6 Q. Just on a single day?

7 A. Just on one day.

8 Q. That was the worldwide number. Did you, in preparing
9 your work in this case, come to an estimate of how much
10 infringement is occurring in the United States?

11 A. Yes, I did. I wasn't able to get specific numbers, so I
12 had to make an estimate based on the information I had.
13 Several hundred million is an extremely conservative number.
14 I would tend to believe several billion times a day in
15 today's dates.

16 Q. Based on all the evidence that you reviewed in this
17 case, including Google's own -- own internal records and
18 their testimony, do you believe that it's more likely
19 that they're sending out several billion of these
20 messages each day in the U.S.?

21 A. Yes, their own testimony set a minimum of 5 percent
22 of -- and the 14 million (sic) is a -- almost a year old
23 number, so based on that, we're up in the billions right
24 there.

25 Q. And we walked through a couple examples of the different

1 information sources which now we refer to as apps. Can you
2 tell me how many of these apps are using the service and how
3 many phones are out there receiving the messages?

4 A. Well, there are tens of thousands of these apps. I
5 think 60,000 something I saw at one count and millions and
6 millions of these Android phones. And, of course, remember,
7 most of these phones are going to have multiple of these
8 apps.

9 Q. And this is from Exhibit 120 and 121; is that right?

10 A. That's correct.

11 Q. Those were the lists of apps that use the service?

12 A. That was provided by Google, yes.

13 Q. And when you say millions of Android phones and tens of
14 thousands of apps, are you talking about in the U.S.?

15 A. That's worldwide numbers is my understanding.

16 Q. Let's go to this last topic, which is the topic of
17 alternatives. Briefly can you explain what we're about to
18 discuss here?

19 A. One of the things I looked at is -- well, if Google were
20 trying -- to try to not infringe, what else could be done?
21 What alternatives are there to getting information to the --
22 to the user? And those would be considered alternatives
23 that wouldn't involve this Google central broadcast server.

24 Q. Did you consider the different alternatives that were
25 available to Google if they wanted to avoid infringing and

1 not have a central broadcast server?

2 A. That's correct.

3 Q. What's depicted on this slide?

4 A. Well, the first thing that -- that came to mind is you
5 simply go back to what there was in 1996, which is you poll
6 for this information. It's what everybody did on the
7 Android phones before 2010 when they rolled out C2DM. And
8 everybody could just repeatedly pick up their phone or they
9 could have their phone automatically go out and for every
10 information source they were interested in, say is there any
11 new information that I want to know about? Most of the
12 time, of course, as you see here, you get back the answer,
13 no. Every now and then you get back a yes.

14 Q. What are the problems with using this method instead of
15 the central broadcast server method?

16 A. Well, two very important problems, and they kind of
17 trade off against each other. The first one is timeliness.
18 If you -- if you poll let's say The Weather Channel for --
19 for any severe weather warnings and two minutes after you do
20 that, a tornado watch is posted for your area. I grew up
21 around here, so I know about tornadoes coming through here.
22 That was two minutes after you poll, but you're only going
23 to let's say bother to check once an hour. Fifty-eight
24 minutes later you're going to find out that there's a
25 tornado two blocks down the street. That just may not be

1 worth it.

2 The other problem is that every time you poll, you
3 use some of the battery life -- some of the -- the energy
4 out of your phone. So the more often you poll, the quicker
5 you drain the phone. The less often, the less timely you
6 get the information.

7 Q. This is Exhibit 117. Can you tell us what this document
8 is?

9 A. This is actually a Google document that they presented
10 to their own Google developers to explain why you didn't
11 want to poll, why that was not acceptable if you had an
12 alternative. And the numbers, I won't bother explaining on
13 the right, but essentially, it talks about how much of the
14 battery life that every single one of those polling
15 operations will take.

16 Q. Now, on this slide, you've got something similar
17 depicted, and it says maintain multiple connections. Can
18 you explain what's shown here?

19 A. Yeah. This is sort of an end run. Without going into
20 too much detail, this is doing something similar to what
21 GCM, the Google central broadcast server does. Only instead
22 of it having a central broadcast server, you maintain an
23 individual open connection to each individual information
24 source.

25 Q. Does -- I'm sorry to cut you off, but does this way of

1 doing things, does that avoid -- excuse me, does that solve
2 the issue of timeliness, making sure you get the information
3 --

4 A. Yes, it does because just like that instantaneous
5 notification under '914 and under GCM, once the information
6 is available, tornado alert, it can shove that notification
7 right down to your phone. So it does solve that problem.

8 Q. So then why wouldn't Google just do this instead of
9 using the central broadcast server?

10 A. Well, first off, this isn't Google. Except for the
11 Android phone, this takes Google out of the picture to a
12 degree. But the big problem is that it drains the battery.
13 Every time you have one of these connections, you have to
14 maintain it. Every time you maintain it, it takes some
15 energy. And the problem is the more of these connections,
16 the faster you drain the battery. When you only had one
17 connection to the Google messaging service, the central
18 broadcast server, that's one drain on the battery. If you
19 have to do this instead of through the central server, but
20 to each information source, then every single one of those
21 just multiplies out. It's a bigger drain on the battery.
22 Phone goes dead that much faster.

23 Q. If you use the central broadcast server method, can you
24 send messages using just one connection?

25 A. Yes. It only requires that the phone maintains one

1 single what they call persistent connection to the central
2 broadcast server -- to Google's software.

3 Q. Under the Google system, the way it infringes, is there
4 still a drain on the battery?

5 A. There is because you've got to maintain that connection,
6 but that maintenance is only for one. So I guess if the
7 only thing you cared about in your life was tornado
8 warnings, it would be equivalent, but that's not realistic
9 and it doesn't make it a viable alternative.

10 Q. If a user had multiple applications on their phone and
11 wanted to get notifications from each of those, what's the
12 difference in the battery drain between the multiple
13 connections and the central broadcast server method?

14 A. In the simplistic answer, it -- it's just straight math.
15 If you have 10 apps you want to get notifications from, you
16 maintain 10 connections. It's 10 times worse than if you
17 only had one.

18 Q. Did you do any measurements of exactly how much battery
19 drain Google is saving on the Android phones by using the
20 infringing method as opposed to this other one?

21 A. Yes, I did. I'm a lot happier in a lab coat than a suit
22 and tie. And we have an electronics lab there in my
23 company. We have all the standard electronics equipment.
24 Some of it's shown here. Some of it is a little unique.

25 The lower right-hand corner, the kind of outer spacey

1 looking thing there is actually our own cell tower, so the
2 -- we can maintain a specific constant signal strength to
3 the phone, wireless access point. We did all this, and we
4 tested each of these phones in a variety of different
5 conditions, determined the battery drain from polling,
6 determined it for persistent, determined from then
7 mathematically what it would be for multiple persistent and
8 polling connections.

9 Q. And what's shown on the screen now?

10 A. That's off an oscilloscope. An oscilloscope's just
11 something -- you see it on all the mad scientist movies --
12 turns electronic signals into something you can visually
13 see. On the left is an idle phone. It's -- it's not even
14 hooked up to GCM or anything. It's -- we think of it
15 usually with the phone as being off, but it's actually on so
16 it can get these alerts and so it can get phone calls and
17 all. And you really can't tell it from this picture, but
18 it's just ever so slightly above zero. There's a slow
19 gradual use of the battery. That's why your battery runs
20 down every week or so.

21 On the right-hand side is the same thing, but
22 we've turned on these persistent connections. And what you
23 see there, and it's highlighted with a red arrow and all, is
24 that many, many, many fold greater cost of one of these
25 maintenance signals, what we call a keep alive of

1 maintaining this persistent connection. That's just one,
2 and it happens repetitively.

3 Q. What were the -- well, let me back up. When you did all
4 this testing, did you come up with some sort of a formula
5 that would allow you to do these calculations and determine
6 how much battery drain was caused by the alternative that
7 Google could use?

8 A. I did. And you see a whole lot of numbers in that
9 formula there. Those are unique to particular batteries and
10 phones and stuff. But basically, the bottom line is the
11 more connections, the more battery drain.

12 Q. Can you give us a couple examples?

13 A. Based on -- on the average measurements there, yes. If
14 we had one connection, as we say, that still places a drain
15 whether it's to GCM or somebody else. If we have two apps
16 and they were making these connections, bypassing this
17 central broadcast server, that's 12.4 percent. If we had
18 five apps doing it, 36.2 percent more drain on the battery.
19 The battery is going to run down sooner.

20 Q. Of all the different alternative ways that Google --
21 that Google could provide notifications and avoid infringing
22 the SimpleAir patent, did you still conclude that this one
23 was the best they could choose?

24 A. Kind of the best of a bad world, but, yes.

25 Q. So these results here show your measurements of how much

1 they would have to cause drain on the Android phone battery
2 if they used their best alternative to infringing?

3 A. That's correct.

4 Q. Did you provide the results of your testing and this
5 formula to Dr. Srinivasan?

6 A. Yes, I did.

7 Q. And who is he again?

8 A. He's the gentleman who -- well-respected gentleman who
9 goes out and knows how to do surveys, how to estimate what a
10 consumer finds important and not. He can explain it better
11 than I can. But he's a person who can tell you how
12 important that these things are to the -- to the customer.

13 Q. Did the information you gave him allow him to calculate
14 how much battery drain would be caused based on how many
15 applications the user has on their phone?

16 A. Yes. I gave it to him as a spreadsheet so he could plug
17 in his own numbers based on what his research showed.

18 Q. Now, there was another alternative that Google had
19 identified. It's something they said they could do to avoid
20 infringement. Can you briefly explain what this one is?

21 A. This is United States patent -- the '914. And as such,
22 it requires that everything be done in the United States.
23 Google suggested that one viable alternative would be to
24 move their servers overseas or outside the United States.

25 Q. And they actually do have servers that are overseas for

1 these services; is that right?

2 A. Yes, that is correct, they do.

3 Q. So is it their contention that they could just use the
4 ones that are overseas instead of using ones in the U.S.?

5 A. Well, I don't believe that's quite what they contend.
6 They still have to have the capacity. They have to have the
7 resource. Their contention was they could make that
8 resource available.

9 Q. Now, in your report in this case, the report that you
10 submitted on infringement and validity, you addressed this
11 issue and provide several reasons in response. I want to
12 just focus on one, and that's this one. It's this other
13 patent, the '279 patent. Can you tell us why in your view
14 Google could not simply avoid infringement by using the
15 servers that are located in Europe and in Asia to send these
16 notifications?

17 A. Yes. And I -- I want to caution everybody. I'm not
18 here to give legal testimony, but the '914 is what we call a
19 method patent. And every one of those steps, as I
20 understand it, have to be done in the United States.
21 SimpleAir also has a patent that you see here, one of the
22 claims. It's called the '279. It's very similar -- central
23 broadcast server, but it's what's called a system claim.
24 And my understanding is -- I've been instructed by -- by
25 legal counsel -- is that the '279 system patent would still

1 be infringed as long as the end points are here. So as long
2 as ESPN is broadcasting a -- a sporting event here in the
3 United States, the phone here in the United States, they'd
4 still infringe.

5 Q. As you understand it, can a system patent like the one
6 SimpleAir got that's shown here, can that still be infringed
7 in the U.S. by putting servers into -- let me -- let me try
8 that one over again.

9 A. Thank you.

10 Q. As you understand it, sir, can a system patent be
11 infringed if the system is put into use in the U.S., even
12 though the servers, the components of the system are located
13 outside the U.S.?

14 A. That is my understanding, yes.

15 Q. And was it your opinion then that moving the servers or
16 simply using the ones overseas would not be an acceptable
17 alternative for Google?

18 A. That would be correct because they would still infringe
19 the '279 patent.

20 Q. And that patent is Exhibit 7?

21 A. That's correct.

22 Q. Thank you, sir.

23 A. Thank you.

24 THE COURT: Dr. Knox.

25 THE WITNESS: Yes, sir.

1 THE COURT: If you'd remain in your seat. I
2 haven't released you.

3 THE WITNESS: Oh, I'm sorry. My apologies, Your
4 Honor.

5 THE COURT: You passed the witness?

6 THE WITNESS: I was so happy to be through.

7 MR. EICHMANN: Yes, Your Honor, pass the witness.

8 THE COURT: Well, contain your happiness. You're
9 not through yet.

10 Cross-examination.

11 CROSS-EXAMINATION

12 BY MR. STOCKWELL:

13 Q. Very sorry to disappoint you, Dr. Knox.

14 MR. STOCKWELL: Which button was it? Three.
15 Thank you, Mr. Barnes.

16 Q. (By Mr. Stockwell) Dr. Knox, good afternoon.

17 A. Good afternoon, sir.

18 Q. I'll let you get your water straight there.

19 A. Yeah.

20 Q. So you mentioned you had spent several hundred hours on
21 this case?

22 A. I don't believe I mentioned an hour number, no, sir.

23 Q. You -- you have a feel for how many hours you've spent
24 working on this case?

25 A. I have a good feel for the amount of calendar time, and

1 it was certainly quite a few. I would not be surprised at
2 your number.

3 Q. And you charged for your time, I assume, to SimpleAir?

4 A. That is correct, by the hour.

5 Q. \$250 an hour sound about right?

6 A. That does.

7 Q. Thank you. Now, the '914 patent that we've been talking
8 about, I think we can agree that that patent does not say a
9 single word about battery life?

10 A. That is correct.

11 Q. And in the preferred embodiment, the commercial
12 embodiment, the AirMedia embodiment, they used a pager to
13 implement that patent?

14 A. That is correct.

15 Q. And a battery life of a pager wasn't an issue back in
16 1996?

17 A. I -- I -- I'm sorry, I may have answered your question
18 slightly misleading then. What they used was a device that
19 they developed, that they invented which used paging
20 signals. It was not a -- a pager like you clip onto your
21 shirt. So I believe it actually had its own power source.
22 It didn't use a battery.

23 Q. Thank you for clarifying that. So battery life wasn't
24 an issue when they were implementing the AirMedia product
25 back in the 1990s?

1 A. That's correct.

2 Q. Okay. Thank you. Now, as I understand your testimony
3 about the -- the battery life comparisons you made, you --
4 you compared the impact of battery life on one connection to
5 an application versus multiple connections to multiple
6 applications; is that fair?

7 A. That's certainly one of the comparisons I made, yes,
8 sir.

9 Q. Sure. One of the comparisons. And you talked about
10 those connections in terms of a persistent connection. Do
11 you recall that?

12 A. That is one of the forms of connection, yes.

13 Q. And when was the '914 patent was filed, it didn't
14 mention persistent connections either?

15 A. That's correct.

16 Q. A persistent connection was not something that was used
17 by AirMedia Live service that implemented the '914?

18 A. That is correct.

19 Q. And the persistent connection is something that
20 Google's -- Google uses that's kind of standard technology,
21 right?

22 A. It is today, yes.

23 Q. Now, the tests you ran focused on something you called
24 battery standby time, correct?

25 A. Well, it's the standby time of the device, which is a

1 function, among other things, of the battery capacity.

2 Q. Right. And what -- what you mean by standby time is
3 sort of how long if you have your phone on a table, you're
4 not using it, how much battery power in terms of life the
5 phone will have without -- without any use; is that fair?

6 A. I'm not sure without any use is the -- the correct term
7 because, of course, it is sitting there. As I said a moment
8 ago, it's actually drawing current out of the battery
9 because it is keeping the receivers alive. If it weren't,
10 it couldn't get these notifications. It couldn't get a
11 phone call. But it's without the user picking it up and
12 looking at a video or doing these other interactive things
13 himself.

14 Q. And those other interactive things, like making a phone
15 call or browsing the web or watching a video, they're going
16 to use up a whole lot more battery power than these keep
17 alive messages that you mentioned?

18 A. That's not quite correct, sir.

19 Q. Over the same --

20 A. During -- during the interval that they're being used,
21 they will use power at a much greater rate. But, of course,
22 this keep alive and all goes on even when the person is
23 asleep.

24 Q. Thank you for clarifying, Dr. Knox. So over the same
25 30-minute period, if I'm watching a video over 30 minutes,

1 that's going to use a lot more power than over that same
2 period if I'm only sending keep alive messages?

3 A. That would be correct, sir.

4 Q. Okay. So the -- the -- your study did not take into
5 account sort of normal consumer uses of the phone when
6 you're watching a video, browsing the web, doing e-mail,
7 talking to somebody on the phone, that's not the kind of
8 standby time study that you did?

9 A. Well, that wouldn't be considered standby time, so that
10 is correct.

11 Q. Okay. And -- and -- so you didn't consider the impact
12 of normal usage on battery power -- battery standby time?

13 A. You would have to define normal usage to do that. For
14 myself, that frankly is not too different because I don't
15 use my phone for streaming videos. Other people may. So,
16 yes, I -- I compared it to what the manufacturer publishes
17 -- one of the things they publish is what is called standby
18 time, and that does not take these other things into
19 account.

20 Q. And the percentage impact on battery life that you
21 testified about today, that would have been much smaller if
22 you took into account some normal uses, such as watching a
23 movie, browsing on the web, or talking on the phone?

24 A. To the extent that those things reduce the available
25 standby time, then the percentage impact would be reduced,

1 yes.

2 Q. Okay. So I want to talk to you about one of the slides
3 you put up. It was how many times that you believe Google
4 to have infringed and the basis for that view. Do you
5 remember that testimony?

6 A. I do.

7 Q. And specifically you were trying to get to the issue of
8 how many times Google had infringed in the United States,
9 right?

10 A. That's correct.

11 Q. And that's because this is a U.S. patent?

12 A. And because Google had provided with any information of
13 that.

14 Q. Okay. And -- and -- but the reason is you can't look at
15 just worldwide revenue. SimpleAir has to get something in
16 as to what the U.S. -- sorry, you can't look at worldwide
17 usage, you got to get something in as to U.S. usage,
18 correct?

19 A. The -- the infringement is for those messages that are
20 within the U.S.

21 Q. Okay. And when you looked at that, you have to look at
22 the messages -- the volume of messages for Google that
23 actually went through servers located in the U.S., right?

24 A. That's correct.

25 Q. And you have to look at the messages that were actually

1 delivered to the phones in the U.S.?

2 A. That's correct.

3 Q. Now, you understand that Google currently has some of
4 the servers that make up the central broadcast server
5 located outside the United States?

6 A. I'm sorry. Are you asking about for U.S. messages, or
7 are you simply talking about does Google practice GCM around
8 the world?

9 Q. The latter?

10 A. Yes, I am aware that GCM resides in foreign servers, as
11 well as domestic.

12 Q. And you're aware that many of the messages that get
13 delivered to Google -- Google Android-based devices in the
14 United States, the messages are routed through servers
15 located outside the United States?

16 A. I don't believe I have any evidence of that.

17 Q. Okay. We'll -- we'll -- we'll look at some of the
18 material you had. Maybe I can refresh your recollection on
19 that.

20 A. Thank you.

21 Q. So let's look -- look at Plaintiff's Exhibit 99, if you
22 can go to Page 7. You recognize this information that you
23 relied on in trying to determine how many messages Google
24 sent through servers located in the U.S., don't you, Doctor?

25 A. I've seen that chart.

1 Q. Right. So this is a formal response that Google gave
2 that identified the location of various servers?

3 A. Yes.

4 Q. And the location on the left-hand column there, it says
5 the location of the sender I -- IP. That's -- that's like
6 where Facebook or whoever generates the -- the message is
7 located?

8 A. That would be correct.

9 Q. And on the right-hand side where it says geolocate --
10 geolocation of device IP, that's where the target Android
11 device is located?

12 A. Yes, that would be correct.

13 Q. And those two entries in the middle, those are some of
14 the servers that make up the central broadcast server?

15 A. It says data center. Yes, I would expect that that
16 would be the servers that make up the central broadcast
17 server.

18 Q. Right. And you can see there are entries there that say
19 unknown, U.S., or non-U.S. that correspond to the various
20 rows and columns here?

21 A. Yes. Is there a title on this that says something like
22 per day, per year, per --

23 Q. We can go back up, but I believe this is per day.

24 A. Okay.

25 Q. This is -- this is the per day --

1 A. Thank you.

2 Q. -- information that you were looking at. Okay. So if
3 we go down to --

4 MR. STOCKWELL: There's a row, Mr. Barnes, that
5 has U.S. -- U.S., U.S., U.S. across all four columns. I
6 think it may be on the next page. Oh, sorry the last one.
7 Yes, thank you. It was on the next page.

8 Q. (By Mr. Stockwell) All right. So this row, you --
9 you -- you had said Google didn't tell you where all the
10 messages were in which all of the servers are located in the
11 U.S., but the line in this interrogatory response, sir, it
12 has U.S. location of -- of the sender. It has U.S. location
13 of the data center handling the request. It has the U.S.
14 location of the data center delivering the message. It has
15 U.S. location of the Android device. And if you could, how
16 many messages -- how many -- in that last column where it
17 says number of send requests, how many is that?

18 A. Well, the number in that column that you've highlighted
19 there, I disagree with the supposition, but the number there
20 is just a little less than 200 million -- 193 million plus.

21 Q. Okay. And if you just look just above that, there's a
22 -- there's a number just above that, and it says location of
23 data center delivering the message non-U.S.?

24 MR. STOCKWELL: No, Mr. Barnes, you were fine
25 where you were. Thank you.

1 Q. (By Mr. Stockwell) The very -- the entry right there
2 above however many messages are there, those messages would
3 not infringe because they went through a non-U.S. server,
4 correct?

5 A. Would not infringe '914, that's correct.

6 Q. That's correct. Okay. Thank you. Now, I wanted to go
7 back to your Slide 19 that you presented.

8 MR. STOCKWELL: If you could pull up Dr. Knox's
9 Slide 19, Mr. Barnes. If you could just blow up that
10 language.

11 Q. (By Mr. Stockwell) Your -- your testimony today in this
12 trial is Google infringes several hundred million, if not
13 several billion times per day. Is that your testimony?

14 A. That's correct, sir.

15 Q. Okay.

16 MR. STOCKWELL: Now, if you could pull up Dr.
17 Knox's original Slide 133.

18 Q. (By Mr. Stockwell) I think you mentioned you also
19 testified in the first trial, didn't you, Dr. Knox?

20 A. That's correct.

21 Q. Now, in the first trial, your testimony was as to how
22 many times has Google infringed, hundreds of millions of
23 times each day in the United States, you remember that,
24 don't you, sir?

25 A. I do.

1 Q. Now, one other question I have is you mentioned that
2 there is something called the '279 patent. You would agree
3 that up through -- you would agree that in May of 2010 when
4 Google introduced the Google Cloud Messaging Service, that
5 they had data centers all over the world?

6 A. That's my understanding. I don't have hard evidence,
7 but, yes, I would accept that.

8 Q. And they had servers in the United States, Europe, and
9 Asia?

10 A. That is correct.

11 Q. And you take the position that Google -- Google's
12 routing -- their alternative of routing the messages through
13 those servers outside the United States would not be
14 feasible because of the '279 patent, right?

15 A. The '279 patent -- actually what I said was the '279
16 patent, as I understand it, not as legal expert, would still
17 be infringed even if those GCM servers, the central
18 broadcast servers, were moved outside of the United States,
19 either in part or in whole.

20 Q. Right. And -- and I'm asking -- let's go back in time
21 to May of 2010, okay? You with me? I'm asking you to make
22 an assumption. Google had a choice. They could have put
23 their servers in the U.S. or they could have put them in
24 their existing data centers outside the U.S. Are you with
25 me so far?

1 A. I believe so.

2 Q. Okay. Now, in May of 2010, when Google had that choice,
3 if it had chosen to put the servers for the Google messaging
4 center outside of the United States, the messages would flow
5 through those servers, they would be delivered to U.S.
6 customers, U.S. customers wouldn't notice any difference in
7 terms of quality of service; you would agree with that?

8 A. No, sir.

9 Q. Okay. So do you know whether they would actually notice
10 a difference?

11 A. Not based on the extremely limited amount of information
12 you've given me, no.

13 Q. But, sir, we just looked at an interrogatory
14 response, and I thought we showed you a situation where
15 messages were being delivered to U.S. subscribers
16 already by Google with servers located outside the
17 United States, right?

18 A. Yes, you did.

19 Q. So that's some evidence that Google could move the
20 server outside the United States and still successfully
21 deliver messages to consumers; you would agree with that?

22 A. The question's obviously much more complex than -- than
23 the way you're asking it. And I disagree as a general
24 premise that you could do what -- what you suggest unless
25 you throw enough money at it to make up for that difference.

1 Q. So are you saying that Google has never successfully
2 delivered messages into the United States through servers
3 located outside the United States?

4 A. No, sir, absolutely not.

5 Q. Okay. Are you agreeing with me that the evidence in
6 this case, including the evidence that you reviewed in the
7 interrogatory response that we just went through, actually
8 show Google actually has successfully delivered messages to
9 users in the United States with servers located outside the
10 U.S.?

11 A. Yes, I -- I do not question that at all.

12 Q. Okay. Thank you. Now, going back to our hypothetical.
13 We're back in May of 2010. Google put servers outside the
14 United States. You say, well, there's this '279 patent. I
15 want to ask you about that. The '279 patent, it did not
16 exist in May of 2010, did it?

17 A. That's correct.

18 Q. In fact, it was not even filed until January of 2011?

19 A. I believe that date is correct.

20 Q. And it did not even issue until October 29th of last
21 year, 2013?

22 A. That's consistent with what I recall.

23 Q. And you understand that Google cannot have infringed a
24 patent that did not even issue?

25 A. At -- until it issued, yes.

1 Q. Right. So from May of 2010 until October of 2013, there
2 could be no possible infringement of this '279 patent?

3 A. You're getting perilously close to a legal question
4 there, but I believe you are correct.

5 Q. Thank you.

6 THE COURT: You pass the witness, Mr. Stockwell?

7 MR. STOCKWELL: Oh, I apologize, Your Honor. I
8 pass the witness.

9 THE COURT: Mr. Eichmann, additional direct?

10 MR. EICHMANN: Yes, Your Honor.

11 REDIRECT EXAMINATION

12 BY MR. EICHMANN:

13 Q. Dr. Knox, does it matter that SimpleAir's patent doesn't
14 talk about battery life?

15 A. No. In fact, there's a thing called unexpected benefits
16 when you -- when you talk about patents. At the time of
17 AirMedia's patent -- I'm sorry -- yeah, AirMedia's patent,
18 the big thing was -- was money and -- and this thing about
19 having to stay connected. My mother down off Lake Murvaul
20 here was on a party line. And if you stay connected, not
21 only did you -- did it cost you a lot, but people got mad at
22 you. Not long after that, which is one of the problems
23 AirMedia had, the world changed. Instead of spending \$30 an
24 hour for connect time, you were spending \$30 a month, and it
25 became not a problem. Then people started using cell phones

1 and things and battery life became important. The '914
2 addresses that.

3 Q. In the last trial when you were talking about why the
4 invention is valid, why it was a real invention, did you
5 identify this unexpected benefit of battery savings as one
6 of the reasons it was valid?

7 MR. STOCKWELL: Objection.

8 THE COURT: State your objection.

9 MR. STOCKWELL: Your Honor, beyond the scope and
10 goes afoul of the motion in limine.

11 THE COURT: Sustained.

12 Q. (By Mr. Eichmann) Dr. Knox, I want to pull up the
13 interrogatory response that counsel showed you about the
14 number of messages.

15 A. Thank you.

16 Q. Now, an interrogatory response, this is something that
17 Google provided in writing during the case; is that right?

18 A. That's correct.

19 Q. And this part here is what they had you focus on. Let
20 me just move it over a little bit. Now, what's shown there
21 says all U.S. messages, right?

22 A. Right. That's a line that we absolutely know we can
23 count because it starts in the U.S., it goes through the
24 U.S., and it ends in the U.S.

25 Q. But this here, this line, this is not the total number

1 of messages, not even for that day for the U.S., right?

2 A. Very much so. That's why I took exception to the -- to
3 the question the way he asked it.

4 Q. And if we look up in the same document, there are other
5 lines that also identify U.S. notifications; is that right?

6 A. There are lines for which all or part of those numbers
7 may also be infringing. For instance -- well, wherever you
8 want to go. The ones I suspect that you have highlighted
9 here are all potential infringing messages.

10 Q. So when you performed your analysis and created an
11 estimate of how many times Google is infringing the
12 SimpleAir patent in the United States, did you consider all
13 this information?

14 A. Yes. I used Google's table and -- and applied what I
15 felt was reasonable.

16 Q. And that's how you came to the number of several billion
17 per day?

18 A. That's one of the things, yes.

19 Q. Thank you.

20 MR. EICHMANN: Pass the witness, Your Honor.

21 THE COURT: Additional cross?

22 MR. STOCKWELL: No, Your Honor.

23 THE COURT: Now you may step down, Dr. Knox.

24 THE WITNESS: Thank you, Your Honor, very much.

25 THE COURT: All right. Ladies and gentlemen,

1 before we call the next witness, we're going to take a brief
2 recess. I expect us to be about 15 minutes. You may leave
3 your juror notebooks in your chairs. Once you get to the
4 jury room, stretch your legs, get a drink of water, don't
5 discuss the case among yourselves, and we'll have you back
6 in here shortly to take up with the next witness. But
7 you're excused for recess at this time.

8 COURT SECURITY OFFICER: All rise.

9 (Jury out.)

10 THE COURT: All right. Be seated, please.

11 Counsel, we're getting a lot of feedback on the
12 court reporter's recording system when you are at the bench
13 for bench conference. It's my suspicion that somebody or
14 more than one person has a cell phone in their pocket that's
15 close to this electronics that might be causing that. If
16 you've got a cell phone in your coat pocket or some other
17 place on your person, try to not bring it with you when you
18 come to the bench next time and let's see if that makes a
19 difference on the feedback problem. With those
20 clarifications, we stand in recess.

21 COURT SECURITY OFFICER: All rise.

22 (Recess.)

23 COURT SECURITY OFFICER: All rise.

24 THE COURT: Be seated, please.

25 Let's bring in the jury, Mr. McAteer.

1 COURT SECURITY OFFICER: All rise for the jury.

2 (Jury in.)

3 THE COURT: Be seated, ladies and gentlemen.

4 Plaintiff, you may call your next witness.

5 MR. EICHMANN: Your Honor, we're going to play
6 video testimony from one of the Google witnesses. This is
7 very short testimony from Felipe Leme from one of the Google
8 engineers. And this will last about one minute.

9 THE COURT: All right. Proceed.

10 (Video clip playing.)

11 QUESTION: Would you please state your name for
12 the record?

13 ANSWER: My name is Felipe de Almeida Leme.

14 QUESTION: What is your job?

15 ANSWER: I'm a software engineer.

16 QUESTION: Who do you work for?

17 ANSWER: Google.

18 QUESTION: So the fact that the GCM uses the MCS
19 connection for all of these different third-party
20 applications, that optimizes battery life; is that correct?

21 ANSWER: Yes, I believe so.

22 QUESTION: Why would using the same MCS connection
23 rather than many different connections improve battery life?

24 ANSWER: Because any connection, it's -- it's
25 expensive resource. You need to keep the socket open, file

1 system. So there -- there -- there is many work behind the
2 scenes that operation system has to do. So the less
3 connections open you have, the less processing powers --
4 processing is done by the CPU and system, and then that --
5 that means less methodization.

6 (End of video clip.)

7 MR. EICHMANN: That's the end of that. We'd like
8 to call Dr. Seenu Srinivasan.

9 THE COURT: All right. This witness has been
10 sworn, correct, Counsel?

11 MR. DOVEL: Yes, Your Honor.

12 THE COURT: Okay. Please have a seat, sir.
13 All right. Counsel, you may proceed.

14 MR. DOVEL: Thank you, Your Honor.

15 SEENU SRINIVASAN, Ph.D., PLAINTIFF'S WITNESS,

16 PREVIOUSLY SWORN

17 DIRECT EXAMINATION

18 BY MR. DOVEL:

19 Q. Dr. Srinivasan, can you tell us what questions you are
20 here to answer for the jury?

21 A. Good afternoon. I am supposed to answer the question of
22 what is a smartphone market willing to pay for the
23 incremental benefit they get from the infringing technology
24 compared to the non-infringing technology.

25 And in addition, if this infringing technology were

1 offered as an option at the market willing to pay price,
2 what fraction or what percentage of Android users would buy
3 that option.

4 Q. Did you find the answers to those questions in your
5 work?

6 A. Yes.

7 Q. Can you just tell us briefly what those answers are?

8 A. The smartphone market is willing to pay \$12.23 for
9 using the infringing technology compared to the
10 non-infringing technology. And second, if the
11 infringing technology is offered at \$12.23, 42 percent
12 of Google Android smartphone users will, in fact,
13 purchase that offer.

14 Q. Was there a particular method or technique that you used
15 to find these answers?

16 A. Yes.

17 Q. What is that called?

18 A. It's a type of survey called conjoint analysis.

19 Q. Can you give us just a brief one- or two-sentence
20 description of conjoint analysis?

21 A. Conjoint analysis is a customer survey method by which
22 you can determine what are the values customers attach to
23 different features of a product, even though those features
24 are not priced separately.

25 Q. All right. I want to ask you some questions about your

1 background and your education. Let's start actually with
2 your education.

3 Can you tell the jury briefly about your educational
4 degrees that relate to your -- your ability to testify here
5 today about conjoint analysis?

6 A. My undergraduate degree in bachelor of technology in
7 mechanical engineering was from the Indian Institute of
8 Technology in Chennai, India. I got my master's and Ph.D.
9 from Carnegie Mellon University in Pittsburg, Pennsylvania.

10 Q. And what was your Ph.D. in?

11 A. My Ph.D. was in business administration.

12 Q. After getting that Ph.D., what did you do at that point?

13 A. I started my teaching career at the University of
14 Rochester in Rochester, New York. For three years, I stayed
15 there before moving on to Stanford University.

16 Q. Are you still at Stanford?

17 A. Indeed.

18 Q. How long have you been at Stanford?

19 A. I've been a professor at Stanford for the past 40 years.

20 Q. And did you do research and teaching at Stanford?

21 A. Yes, indeed.

22 Q. And now in the course of your work in your research, did
23 you develop a particular expertise?

24 A. Yes.

25 Q. What is your expertise in?

1 A. My expertise is in this area known as conjoint analysis.

2 Q. At Stanford, have you taught classes on conjoint
3 analysis?

4 A. Yes.

5 Q. Have you done research on topics related to -- or topics
6 involving conjoint analysis?

7 A. Very much so.

8 Q. Have you had any research publications that have been
9 published in peer-reviewed journals that relate to conjoint
10 analysis?

11 A. Indeed.

12 Q. Have -- about how many published research journals have
13 you had published that are in the field of market research
14 and market analysis?

15 A. The total number of research publications is about 80,
16 8-0.

17 Q. All right. Now, have you also worked as a consultant
18 for companies to conduct conjoint analysis research?

19 A. Yes.

20 Q. And have you produced or created software that companies
21 can use to conduct conjoint analysis?

22 A. Indeed.

23 Q. What's the name of that software?

24 A. The current software is called ASEMAP. It can be
25 spelled A-S-E-M-A-P but ASEMAP.

1 Q. Can you identify some of the companies that have used
2 your conjoint methods for their products and services when
3 trying to find out answers?

4 A. For example, Colgate Palmolive, Johnson & Johnson, Wells
5 Fargo, and Philips.

6 Q. What about -- what about eBay?

7 A. EBay has used it; Marriott has used it.

8 Q. What about Pfizer?

9 A. Pfizer, too.

10 Q. Have you conducted conjoint analysis research on
11 consumer electronics before you conducted the research on
12 smartphones in this case?

13 A. Yes, indeed.

14 Q. Can you give us examples of some consumer electronics
15 you've done conjoint analysis on before you did the
16 smartphone research?

17 A. Yes. I have done it on digital cameras, laptop
18 computers, and also as I mentioned, this Philips electric
19 toothbrush.

20 Q. Now, in the field of market research, are there any
21 awards that are given to recognize outstanding work in the
22 field?

23 A. Indeed.

24 Q. What -- can you identify what those awards are?

25 A. There are three awards in market research. One is the

1 Hardin Award; another one called the Churchill Award; and a
2 third one called the Converse Award.

3 Q. Dr. Srinivasan, were you fortunate enough to win any of
4 those awards?

5 A. Indeed. I've been lucky enough to get all three of
6 those.

7 Q. Right. Now, have you prepared a summary of your
8 experience and research publications which is Exhibit 33 in
9 this case?

10 A. Yes.

11 Q. Now, can you just tell the jury briefly -- well, where
12 do you live now?

13 A. I live in Los Altos, California, which is right next to
14 Palo Alto, California. We are 40 miles from San Francisco.

15 Q. Can you tell the jury just briefly something about your
16 family?

17 A. I'm married for the past 42 years. And my wife and I
18 have two grown boys, and all of us are in the teaching
19 business. My wife does the most important teaching to
20 kindergarten, and they all -- the two sons as well as myself
21 are professors. My two sons are both professors at the
22 University of California; one in Los Angeles and another one
23 in Berkeley, California.

24 Q. In doing your work in this case, before you got started
25 or at any point, were you told or instructed or guided in

1 reaching any particular results?

2 A. No.

3 Q. Were you told that the amount that you would be paid
4 would be greater or lesser depending on any -- any results
5 that you reached?

6 A. No.

7 Q. Were you -- how were you paid? Was it by the hour, or
8 how were you paid?

9 A. I was paid by the hour.

10 Q. And at what rate?

11 A. \$900 an hour.

12 Q. How does that compare to the rate when companies hire
13 you to do conjoint analysis on their products, do you charge
14 the same rate or a different rate?

15 A. It's exactly the same rate.

16 Q. If Google had hired you in this case to do a conjoint
17 analysis, is that the same rate that you would have charged
18 Google?

19 A. Yes.

20 Q. If Google had hired you to do this -- answer these
21 questions, would you have used this same approach or reach
22 the same results?

23 A. Yes.

24 Q. Do you have any particular bias against Google?

25 A. No.

1 Q. All right. Let's talk about your survey. Now, why --
2 in trying to find out answers to how important these
3 infringing notifications are, why can't you just ask people
4 directly, give them a survey, ask them what they would pay
5 for?

6 A. What we have learned in research in the past is that if
7 you directly ask people how much they're willing to pay, you
8 get inaccurate answers. In general, we get numbers too
9 high. People say they are willing to pay, but then, in
10 fact, if they have to buy it, they don't -- they actually
11 are not willing to pay that much.

12 Q. What does conjoint analysis do differently that allows
13 you to find correct answers?

14 A. First, it puts this feature which you are questioning in
15 the context of other features so that you don't ask the
16 question directly only with respect to one feature.

17 Secondly, it asks you to trade off; in other words, is
18 this more important or that is more important. How much
19 more important is this feature compared to that feature. By
20 asking a series of questions like this, it gets more
21 accurate results.

22 Q. Now, is it based on just asking one question?

23 A. No, multiple questions.

24 Q. And what's done when you get answers to those multiple
25 questions?

1 A. So we take all those answers together, analyze it using
2 a computer program that I have done, and using that computer
3 program, you can determine how much importance customers are
4 attaching to the different features.

5 Q. Is conjoint analysis recognized as good science in the
6 marketing research community?

7 A. Indeed.

8 Q. How do you know that?

9 A. Well, the field has been around for about at least 40 --
10 35 years, let us say. And a lot of research is published in
11 the top journals in the field, and it is routinely used.

12 Q. Is it commonly used by companies, major companies who
13 had products or services that want to find out what will be
14 the result if they add a particular feature to a product or
15 service?

16 A. Indeed.

17 Q. Do you know about how many times it's -- it's used?

18 A. Conjoint analysis itself is used more than 18,000
19 commercial applications each year all over the world.

20 Q. In doing your work in this case, what particular feature
21 or features of smartphones were you trying to find out
22 information about?

23 A. I needed to find out about three things. One, the
24 notification feature, which we have been talking about;
25 second, battery life, which also we have been talking about.

1 And because I needed to answer the question in terms of
2 dollars and cents, I needed to also find out how much
3 importance customers attach to price itself.

4 Q. Why is it that -- if you wanted to find out the value of
5 notifications, why were you focused -- why did you include
6 battery life in your analysis?

7 A. Well, as I mentioned before, my task was to find the --
8 what -- how much the market is willing to pay for the
9 incremental benefit from the infringing technology compared
10 to the non-infringing technology.

11 If you use a non-infringing technology, that the
12 battery life, the drain on battery is going to be much more;
13 and, therefore, if I'm comparing the infringing technology
14 to the non-infringing technology, I needed to take into
15 account how much is that additional battery life lost by the
16 non-infringing technology worth to consumers.

17 Q. What was the source of information for how -- how
18 notifications affected battery life?

19 A. Dr. Knox had supplied to me two formula, one for the
20 infringing system and one for the non-infringing system.

21 Q. Did you ask consumers just about those three things;
22 that is, notifications, battery life, and -- and the value
23 of a dollar or price?

24 A. No.

25 Q. Did you -- did you include other features?

1 A. Yes. I included 13 more features in addition to those
2 three features.

3 Q. I placed on the screen a list of features. Do you
4 recognize this?

5 A. Indeed.

6 Q. And what is this?

7 A. This is the list of 16 features that I actually included
8 in my customer survey.

9 Q. And why are you including additional features if you're
10 just interested really to the answer of about three of them?

11 A. Well, if you ask a question only about those three
12 features, then you are kind of overemphasizing those
13 features, and you may get inflated answers. So by putting
14 those three features in the context of 13 other features,
15 then you get more realistic answers. This is what we have
16 learned in conjoint analysis.

17 Q. Let's talk about how this survey was actually taken.
18 Was this done by calling up people on the phone?

19 A. No.

20 Q. How was it implemented?

21 A. We took a scientifically sound random sample of U.S.
22 adults, asked them first questions about whether they own a
23 smartphone; in particular that it can connect to the
24 Internet, can receive email messages, and can -- and the
25 person can download applications on that smartphone. And

1 then the questionnaire was administered to them on the web.

2 Q. On the web, on the Internet?

3 A. Yes.

4 Q. How many participants or survey respondents did you use
5 for your research?

6 A. 623.

7 Q. Is that a big enough sample to get reliable answers?

8 A. Yes.

9 Q. How do you know that?

10 A. Well, the typical sample size in conjoint survey studies
11 is around 300 to 400. So this is larger than that.

12 Q. Did -- were you able to compute a margin of error as a
13 result of doing your work in this case? That is, you could
14 give us an estimate of how far off your answer might be?

15 A. Indeed.

16 Q. Now, when you were -- when you were taking -- doing this
17 survey, was it limited just to Android phone users?

18 A. No.

19 Q. Why not?

20 A. Because, in other words, you have to ask yourself, when
21 Android is considering whether -- whether or not they should
22 provide this infringing technology, one of the reasons that
23 they are actually doing this is to attract customers from
24 other telephone -- other smartphone companies, because
25 everybody is trying to increase their market share.

1 So if you're trying to do that, then I need to
2 understand how other customers who are currently not Android
3 customers would respond to this infringing technology
4 compared to the non-infringing technology.

5 Q. When did you conduct this survey? When was it
6 implemented?

7 A. In February of 2012.

8 Q. I want to ask you -- withdrawn.

9 In your survey, were the -- were customers asked to make
10 tradeoffs like you discussed earlier between two different
11 things?

12 A. Yes.

13 Q. I want to show you one of the screens that was from your
14 survey. Do you recognize this?

15 A. Let me just wear my other glasses, if you don't mind.
16 Yes, I do recognize it.

17 Q. Can you -- is this -- can you generally describe for the
18 jury what this is?

19 A. Here, for example, we're asking the customer -- the
20 consumer, is price more important to you or screen size more
21 important to you. And initially, you are seeing these two
22 bars which indicate how important they are to you, kind of
23 their equal, 50/50. The bar lengths are equal.

24 Now, if the customer feels one of them is more
25 important to that particular customer than the other one,

1 they will click on that thing which they think is more
2 important and drag it. For example, in this particular
3 case, this customer thinks that price is more important than
4 screen size. So his or she has dragged that to the right,
5 and as she drags it to the right, the other one drags itself
6 to the left so that you can't say both are important. You
7 have to say how much more important one is compared to the
8 other.

9 In this case, it's like nine times more important,
10 price is, compared to screen size.

11 Q. Here's another example. What's being compared here?

12 A. Here, too, other features are being compared. One is
13 touchscreen and the other one is notifications. And, again,
14 how much more important is one compared to the other.

15 Q. Now, what if a customer concludes that a particular
16 feature is not important at all compared to something else
17 that the customer or the survey respondent is being asked to
18 compare?

19 A. Suppose, for example, the customer thinks that
20 notifications and getting the notification quickly as
21 opposed to not getting it is not particularly important to
22 them, then -- this is the bottom feature in this particular
23 screen -- they will drag it to the left so that essentially
24 you can tell that that has no importance or main importance.
25 If they are to compare touchscreen to notifications,

1 touchscreen is much more important than notifications.

2 Q. After the survey was completed and you calculated your
3 results, did you have any statistical test available to you
4 to determine how reliable the -- the data was that you
5 received?

6 A. Indeed.

7 Q. What's the name of that test?

8 A. It is called the correlation coefficient.

9 Q. When you analyzing -- did you analyze the correlation
10 coefficient in this case?

11 A. Yes.

12 Q. What did it tell you about the reliability of the data
13 from the respondents?

14 A. If I -- I had the total sample as I mentioned of 623
15 people. Of them, some of them are of higher quality data.
16 If I took the higher quality data, the average correlation
17 was 0.88. That's like 88 percent.

18 Q. What does that mean?

19 A. That's a very high correlation.

20 Q. Now, I'm going to ask you something about this concept
21 of market willingness to pay, and I'd like you to explain
22 what this concept is, what this -- what this means using
23 this diagram that's on the board now.

24 A. Yes. So in this board, currently we have a smartphone
25 without the feature, and the phone is currently selling for

1 \$200. Now, we can put an attractive feature on it, for
2 example, notifications, and that increases, of course, the
3 appeal of this smartphone at least for some users. And,
4 therefore, the demand for that phone, if the price is kept
5 at \$200, will go up.

6 Now, the question we ask ourselves is how much can I
7 increase my price and still keep the unit sales the same as
8 before. That is, what is the increase in price. What is
9 shown there a little bit of a red mark there, how much can I
10 increase my price because I have provided the desirable
11 feature so that we just make the total sales remain the same
12 as it was before.

13 Q. And what is market willingness to pay?

14 A. Market willingness to pay is that incremental price
15 which makes the unit sales remain the same before and after.

16 Q. If price is not increased and a feature's added, what
17 happens?

18 A. Then you have unit sales will increase.

19 Q. What do you mean by unit sales?

20 A. That is, the total number of smartphones, for example,
21 which have the Android operating system, will increase.

22 Q. Is there a particular method that you used in order to
23 calculate the market's willingness to pay after you received
24 all your data?

25 A. Yes.

1 Q. And what's shown on the board at this point?

2 A. This is a research paper I published with Professor
3 Ofek, who is a professor of Harvard Business School.

4 Q. How does this relate to the method that you used to
5 calculate the market's willingness to pay?

6 A. As the title indicates, it very much is to do with how
7 much the market is willing to pay for a feature.

8 Q. And what is on the screen now this -- with this No. 14
9 at the end of it?

10 A. There's a little bit of Greek and Latin, I apologize.
11 But it gives you a formula, a mathematical formula, for
12 calculating that market willingness to pay. And it is
13 called Formula 14 in this particular paper.

14 Q. Is this formula one that is recognized in the market
15 research field?

16 A. Yes.

17 Q. How do you know?

18 A. Well, the market research -- the marketing science
19 community as it is called recognizes in each year the paper
20 which has had the biggest contribution that year, and this
21 particular paper won that award in that particular year.

22 Q. What year was that?

23 A. 2002, I believe.

24 Q. Is this formula or variations of it used in market
25 research commonly in order to calculate market willingness

1 to pay?

2 A. Yes.

3 Q. Well, let's turn to your answers in this case, and I put
4 on the board a chart that has a lot of numbers.

5 Do you recognize this?

6 A. Indeed.

7 Q. Okay. I just want to focus on the first line and then
8 walk through it.

9 Can you tell us what is that first column, the one that
10 says O-S weights?

11 A. Well, we just talked about that formula that Greek and
12 Latin formula I showed a minute ago. So the question is
13 asking -- the first column is, did we use those, the exact
14 formula or variation thereof.

15 Q. What is the second column smartphone price range?

16 A. The second column is saying -- I want -- I want the
17 answer -- for any smartphone, which is in that price range,
18 \$50 all the way to \$300. This is the price for a two-year
19 contract of a smartphone with a service provider such as
20 AT&T or Verizon.

21 Q. And what is the next column, MWTP?

22 A. The MWTP stands for what the market is willing to pay,
23 market willing to pay, and that is \$12.23 for the Android
24 smartphones.

25 Q. Is that the result of your research and use of

1 this -- the formula that you described earlier, the tech
2 sheet you described earlier?

3 A. Yes.

4 Q. Now, there's two more columns after this, after \$12.23.

5 Can you explain to the jury what those are?

6 A. This is the thing about margin of error we talked about.
7 So the question is, I want to be 95 percent confident that
8 the answer I give you is the right answer.

9 If you ask me -- to give me one answer only, I would
10 have told you \$12.23. But if you want to ask me -- I want
11 to be 95 percent confident your answer is right, I am
12 telling you here that the answer has to be \$8.33 on the low
13 end to \$16.14 on the high end.

14 Q. How were you able to calculate this 95 percent
15 confidence? Is that a statistical technique or what is it?

16 A. Yes, it is a statistical technique.

17 Q. Is it a technique that's recognized and used in the
18 market research community?

19 A. Yes.

20 Q. Let's go down to the next columns. Can you -- without
21 walking through all of them, just barely explain what's
22 shown in those three other columns?

23 A. Now, I'm asking the question, first of all, use the
24 more -- the full Formula 14; that is, the Greek and Latin
25 formula you saw before. Suppose you use the full formula as

1 opposed to the variation that I talked about.

2 And number two, you know, the price of a phone is not
3 in such a wide range from \$50 to \$300, but let's first
4 consider one of these smartphones which are in the 50 to a
5 hundred-dollar range, then I'm considering what happens if
6 the price is between hundred dollars and \$200; and finally
7 when the price is between \$200 and \$300. And the market
8 willingness to pay changes depending on what the current of
9 the smartphone is.

10 Q. Can you tell us what the range is between the market
11 willingness to pay of those other three columns?

12 A. They're kind of varying about a dollar. At the low end,
13 it is like \$12.77; and at the high end, it is \$13.32 is the
14 market willingness to pay.

15 Q. And what -- what did you conclude would be your opinion
16 as to the market willingness to pay in this case for
17 using -- for using the infringing technology as compared to
18 the next best alternative non-infringing technology?

19 A. My opinion is what the smart -- the smartphone market is
20 willing to pay for the incremental benefit that they get
21 from the -- for receiving notifications using the infringing
22 technology compared to the non-infringing technology. My
23 number will be \$12.23 for smartphone.

24 Q. And I placed another slide on the screen. Did you --
25 can you explain to the jury what this depicts?

1 A. So when we are thinking about this -- excuse me -- is
2 that suppose this infringing technology is offered only as
3 an option. That is, it is not -- it is not put in every
4 form, but we offer it as an option, and the price it at
5 \$12.23. Suppose we do that.

6 What percentage of Google Android users will, in fact,
7 purchase that option. And the number turns out to be 42.2
8 percent.

9 Q. Did you also calculate a margin of error for that?

10 A. Yes, indeed.

11 Q. Is that what's shown on the screen in the columns just
12 to the right of it?

13 A. Yes. So it is saying that the number can vary anywhere
14 from -- if I want to be 95 percent confident, the number has
15 to be somewhere between 35 percent and 49 percent.

16 Q. Now, there's a lot of numbers here. Did you prepare a
17 summary of opinions or relevant opinions which is
18 Plaintiff's Exhibit 85?

19 A. Yes.

20 Q. All right. I've got one more item I wanted to ask you
21 about.

22 Can you tell the jury what is shown here?

23 A. So in the survey, we also asked questions to consumers,
24 first of all, how many applications they have downloaded on
25 their smartphones.

1 And number two, if they have downloaded applications,
2 how many of those downloaded applications had automatic
3 notifications. And what is highlighted in yellow there are
4 those customers who say they -- they have six or more
5 applications which have automatic notification.

6 And if I sum those numbers under the column called
7 Android Operating System Users, that is a 15.5, the 3.7,
8 1.6, and 1.1, it's about 22 percent of Google Android users
9 that have six or more notification applications.

10 MR. DOVEL: Your Honor, I have no more questions
11 of this witness at this time. I'll pass the witness.

12 THE COURT: All right. Cross-examination?

13 MR. STOCKWELL: Yes, Your Honor.

14 CROSS-EXAMINATION

15 BY MR. STOCKWELL:

16 Q. Good afternoon, Dr. Srinivasan.

17 A. Good afternoon.

18 Q. Now, you understand that Google does not sell the
19 smartphones that you actually surveyed in this case, don't
20 you?

21 A. That's my understanding.

22 Q. And those smartphones that you surveyed are not phones
23 that Google sells. Instead, they are phones sold by third
24 parties like HTC, Samsung, LG?

25 A. That's correct.

1 Q. Okay. Now, Google offers Android software that those
2 third parties can install in their phones, right?

3 A. That's right.

4 Q. You're aware that Google does not charge for that
5 Android software?

6 A. That is what -- that's my understanding.

7 Q. Okay. And you're aware that Google does provide apps
8 that are used with Android devices by making its Google Play
9 Store available so app providers can put apps on the Google
10 Play Store?

11 A. I'm not familiar with Google apps per se.

12 Q. Well, you just mentioned -- your last slide actually
13 showed the numbers of apps that users had.

14 A. But that's not Google apps, is it?

15 Q. Correct.

16 A. Okay.

17 Q. But you're aware that those apps can be downloaded onto
18 an Android phone?

19 A. Yes.

20 Q. Okay. And you're aware that many apps are free?

21 A. Yes.

22 Q. In fact, you surveyed, I think it was roughly 10 apps,
23 as to how users were using those apps, and every single one
24 of those apps were free?

25 A. There were some questions with respect to the particular

1 apps they had received, and what you say sounds right. I
2 haven't looked at it most recently, but it sounds right.

3 Q. And are -- you're aware that when apps are priced --
4 that is, when somebody actually charges for an app, the
5 price is usually a buck or two?

6 A. That's my understanding, too.

7 Q. And you're aware that apps -- some apps, not all apps,
8 but some apps can receive notifications?

9 A. Quite a few applications receive notifications, yes.

10 Q. Right. And some of the ones you surveyed like the
11 Facebook app, that receives notifications?

12 A. Yes.

13 Q. And you're aware that apps do things other than just
14 receiving notifications. I mean, Facebook let's you
15 actually connect to your friends, connect to the Facebook
16 website. You're aware of that?

17 A. That's true.

18 Q. So you mentioned you had a slide. It was one of your
19 early slides about how many smartphone features you were
20 testing. Do you remember that?

21 A. Yes.

22 Q. So if you looked at an app -- so if you looked at apps,
23 you have game apps; you have news apps; you have social
24 networking apps. You would agree that apps also have
25 multiple features, and notifications is just one of many of

1 those features?

2 A. The feature list I -- you saw earlier are features of
3 smartphones, not features of apps.

4 Q. And I understand that, and thank you for clarifying
5 that. But what I'm -- I'm making a different point. If you
6 created a feature list for apps, there would be a number of
7 features on there: Content, game, sports, news, weather,
8 notifications.

9 Is that fair?

10 A. So your question is, if I did a conjoint study on apps,
11 would notifications be a feature of it?

12 Q. Yes.

13 A. Yes.

14 Q. And you didn't do a conjoint study on apps.

15 A. That was not my assignment.

16 Q. In fact, nobody asked you to do a conjoint study on
17 apps?

18 A. Correct.

19 Q. And now you heard -- you were here through opening,
20 right?

21 A. Yes, yes.

22 Q. And you heard Plaintiff explain you were going to
23 testify, and then another person, Mr. Mills, was going to
24 testify --

25 A. Yes.

1 Q. -- right?

2 You don't know how Mr. Mills, the Plaintiff's damages
3 expert, actually used your survey in his damages analysis,
4 do you?

5 A. That's correct.

6 Q. Okay. So you gave him -- you went off and did your
7 survey. You calculated your \$12.23 and your 42 percent, and
8 you just handed that off, and you're not -- you don't know
9 how Mr. Mills then used it?

10 A. That's correct.

11 Q. Okay. So when you did that survey, that survey that
12 calculated this \$12.23, I think you call it market
13 willingness to pay?

14 A. That's correct.

15 Q. That's based on your Formula 14?

16 A. That's correct.

17 Q. So that Formula 14 number -- Formula 14 is not the same
18 as conjoint analysis?

19 A. Okay. Conjoint analysis determines the importance and
20 values customers attach to different features. You can use
21 that information for determining what the market is willing
22 to pay for your particular feature. So Formula 14 is an
23 application of conjoint to determining market's willingness
24 to pay.

25 Q. Right. Formula 14 is sort of a subset of conjoint

1 analysis that you talked about in that paper you showed?

2 A. I missed one word of what you said.

3 Q. I'm sorry, a subset.

4 A. Can you please repeat the question?

5 Q. Yes, sir, I'm sorry. Formula 14 is a subset of conjoint
6 analysis like what you talked about in your paper?

7 A. It's a subset, yes.

8 Q. Thank you. Now, the survey you did in this case, it was
9 done in February 2012, and it was originally conducted for
10 the purpose of being used against Apple and RIM, right?

11 A. It was used for another case, yes.

12 Q. Right. And Apple and RIM, Blackberry, they make and
13 sell smartphones?

14 A. Yes.

15 Q. And the price ranges you studied in this survey range --
16 the global price range was from 50 to \$300?

17 A. That's correct.

18 Q. Apple and RIM, because they sell those smartphones, they
19 can set the prices for those smartphones?

20 A. That's right.

21 Q. They can increase it or decrease it?

22 A. That's right.

23 Q. The -- the Android phones you surveyed, you said Google
24 doesn't sell those. You agree Google couldn't increase or
25 decrease the prices of those smartphones?

1 A. That's what I said earlier.

2 Q. Yes. Now, the Formula 14 calculation you did on your
3 February 2012 results, that's not the same thing as an
4 optimal price that a company can charge for a product
5 feature, is it?

6 A. They can make more profit if they charge possibly a
7 different price than market's willingness to pay, but not
8 less.

9 Q. And, sir, you would agree with me then the Formula 14 is
10 not the same thing as the optimal price that a company can
11 charge for a product feature?

12 A. Yes.

13 Q. You cannot use your formula to determine what the
14 increase in price is for a feature?

15 A. As I mentioned, it gives you the floor or the lower
16 limit of how much profit you can make with this feature, but
17 you can make more profit if you change -- if you have the
18 optimal price, yes.

19 Q. So let me make sure we're in agreement because I'm
20 asking a very precise question. You can't use Formula 14 to
21 determine what the increase in price is for a feature?

22 A. That's correct.

23 Q. Okay. You certainly cannot use your Formula 14 to
24 determine the price Google could charge for a notification
25 application, could you?

1 A. That relates to the previous question that you just
2 asked.

3 Q. Well, I'm -- actually I'm switching gears a little bit.

4 A. Okay.

5 Q. We -- you -- the previous question was about whether you
6 could use it to price a feature. And earlier, I think we
7 agreed, you did not survey notification features, right?

8 A. I -- I -- I did not survey apps, which is what I think
9 you asked me before, not notification features, yes.

10 Q. Okay. Thank you. So you -- your -- your Formula 14
11 cannot be used for Google to price a hypothetical
12 notification app that could be downloaded from Google's
13 website?

14 A. Well, it depends on what you mean by a notification app.
15 For example, if you mean by a notification app that
16 something which will provide notifications using the
17 infringing technology, yes, you can.

18 Q. You can't, so -- so, in fact, you're saying you did
19 survey apps and app features?

20 A. No.

21 Q. So, sir, let me make sure I understand your testimony
22 because this may be an important point for the jury --

23 A. Sure.

24 Q. -- to understand.

25 A. Sure.

1 Q. You did not go out and ask consumers, let's start with
2 an app, a one to two-dollar app, and figure out what the
3 value of the timeliness of notification feature is to all
4 the other features of that app, did you?

5 A. I did not.

6 Q. Okay. So let's assume we've got a hypothetical app.
7 Let's assume it's a -- let's assume it's a Facebook app,
8 okay? It's got all the social networking features. You can
9 log in. You can post things on the wall, but it doesn't
10 have notification. You got that assumption in mind?

11 A. Yes.

12 Q. And let's assume you added notification to that app.
13 You could download something and add it to that app. Your
14 survey doesn't tell you what price to charge for downloading
15 notification functionality into that Facebook app, does it?

16 A. It does.

17 Q. It does?

18 A. Yes.

19 Q. It tells you to charge \$12 for downloading notification
20 functionality into a Facebook app?

21 A. No, it doesn't say that. You said something more.

22 Let's be very clear about it because I want you to restate
23 the question, if necessary. What you said a minute ago is
24 that this particular app, this so-called notification app,
25 as you called it, actually will be able to deliver you all

1 apps, such as Facebook, such as other things, and in -- can
2 provide notifications of all those apps. That's a very
3 different type of app compared to an app -- any other app
4 that I buy.

5 Q. And your testimony under oath is that that's the survey
6 you conducted was for a hypothetical notification app --

7 A. No.

8 Q. -- that provided all features of notification to all --

9 THE COURT: Just a minute, counsel. I don't
10 believe he was through with his answer. Let's make sure
11 that he finishes his answer before you proceed with your
12 next question.

13 MR. STOCKWELL: Certainly, Your Honor.

14 Q. (By Mr. Stockwell) Let me -- if -- if you're not done,
15 I will re -- I will withdraw the question and restart, Dr.
16 Srinivasan, so we've got a clear record.

17 A. Okay.

18 Q. So --

19 A. Let me put it this way. If the particular app that you
20 just mentioned which can -- is an app, but is an app of a
21 very different kind, that app can actually provide
22 notifications of all downloaded applications that you
23 currently have on your smartphone. This is not other app --
24 other apps are not like that. The particular app that you
25 mentioned can deliver notifications of all other downloaded

1 apps that you already have. If you are asking me -- let me
2 finish, please. If you are asking me, can I determine the
3 value of the app, yes, because that is -- now becomes a way
4 I can enhance my smartphone experience and my survey wasn't
5 to smartphones.

6 Q. And thank you, Dr. Srinivasan. So your report talks
7 about downloading a hypothetical notification app that can
8 provide notification functionality across multiple apps.
9 Your report, not your testimony here?

10 A. My report was about smartphones, as I mentioned. It is
11 not about apps. But you have just introduced a different
12 type of app, and I am telling you from my knowledge of
13 conjoint analysis, that -- that particular app that you
14 mentioned, which is different from all other apps, what is
15 the value that smartphone users will attach, I can determine
16 that using the survey I already did, although that was not
17 the direct questioning I did, you're absolutely right.

18 Q. Thank -- thank you, Dr. Srinivasan. Let me move on to
19 your market willingness to pay, the Formula 14. That's
20 based on a theoretical assumption that competitors do not
21 react to the attribute and price changes made by the firm
22 offering that particular attribute.

23 A. That is correct. It is assuming what is called all else
24 remaining equal.

25 Q. And if we could pull up a copy of your paper.

1 MR. STOCKWELL: Mr. Barnes, Defendants' Exhibit
2 367, Page 1.

3 Q. (By Mr. Stockwell) Do you recognize this as your paper?

4 A. Indeed.

5 Q. And if we go to Page 10, if we go to the Section 4.3,
6 kind of bridges over to the next column. Do you see that
7 Section 4.3, and then it bridges over to the next column?

8 A. Yes, I see it.

9 Q. And it says: In many cases, it is more realistic to
10 assume that competitors will, in fact, react by adjusting
11 their own prices. Do you see that?

12 A. Yes.

13 Q. Now, this was the paper that talked about your Formula
14 14, correct?

15 A. That's correct.

16 Q. And the paper actually modeled the price reaction of
17 competitors?

18 A. This was a later section of the paper after the formula
19 was supplied.

20 Q. And it actually modeled the price reaction of
21 competitors?

22 A. Yes.

23 Q. And your study in this case did not consider any
24 competitive reaction in the marketplace if Google were to
25 attempt to impose some fee that would result in consumers

1 paying this hypothetical \$12.23?

2 A. I did not do that study, yes.

3 Q. So I want to talk a little bit about the features that
4 you included. If we could go to your report at Table A1. I
5 believe this was a slide that you put up that had the
6 features.

7 MR. STOCKWELL: I think it's on Page 167, Mr.
8 Barnes.

9 Q. (By Mr. Stockwell) While Mr. Barnes is pulling that up,
10 I think you said you tested 16 features, correct?

11 A. That's -- that's correct.

12 Q. And timeliness of notification was the second least
13 important feature out of the 16, right?

14 A. That's correct.

15 Q. And the FM tuner feature was the least important
16 feature, correct?

17 A. That's correct.

18 Q. Okay. Now, then this is the table we have. That FM
19 tuner feature you studied was suggested by counsel, right?

20 A. It was either by counsel or the economics expert.

21 Q. And if FM tuner was not included, notifications would
22 have ranked last on the list of features here in terms of
23 attributes --

24 A. That's correct.

25 Q. And that would have reduced the value of your Formula 14

1 calculation?

2 A. No. In fact, it would have increased it.

3 Q. Okay. So let's talk about the features that you did
4 include. The other features you included are listed
5 here. You said there's a total of 16. We can agree
6 that a proper conjoint study has to include those
7 features that consumers consider important in choosing a
8 smartphone?

9 A. May I ask you to repeat the question, please?

10 Q. Yes. Can we agree that a proper conjoint study has to
11 include those features that consumers consider important in
12 choosing alternative smartphones?

13 A. Yes.

14 Q. And in deciding what features to include, you looked at
15 the 2011 Annual Buying Guide from Consumer Reports?

16 A. That's correct.

17 Q. And if we go to that Buying Guide --

18 MR. STOCKWELL: It's Defendant's Exhibit 362, Page
19 6, Mr. Barnes. If we can go to that Annual Buying Guide.
20 We may need to -- you may need to rotate that feature list.

21 Q. (By Mr. Stockwell) There are usability features listed
22 in the guide that you did not directly measure, right, sir?

23 A. It was indirectly incorporated by a feature I had called
24 brand.

25 Q. Brand?

1 A. Yeah, it was not directly captured, you are right.

2 Q. Okay. Well, let's -- before we get to the brand issue,
3 let me just make sure I've got a list of features that you
4 didn't test. So this is -- these are some of the features
5 listed in the Annual Buying Guide. Your study did not test
6 navigation, right?

7 A. That's correct, it did not explicitly consider that.

8 Q. Voice quality?

9 A. Correct.

10 Q. Phoning?

11 A. Correct.

12 Q. Messaging?

13 A. Correct.

14 Q. Web browsing?

15 A. Correct.

16 Q. Multimedia?

17 A. Correct.

18 Q. And we can agree that the features in this Annual Buying
19 Guide are important to consumers?

20 A. But they are captured by the brand attribute indirectly.

21 Q. And that's not my question, sir. My question is: We
22 can agree that the features in the Annual Buying Guide are
23 important to consumers?

24 A. Yes.

25 Q. And if you leave out important features, that omission

1 is going to make your study less reliable?

2 A. If I had omitted it, yes.

3 Q. If you had omitted it. Now, you keep saying brand. So
4 it's your contention that brand includes all of these
5 features?

6 A. I'm not saying that. What I am saying is that brand
7 conveys to a good extent the usability of the smartphone.
8 In fact, one of the values people place on the Apple iPhone
9 is that it is -- it is easier to use. So it kind of
10 indirectly captures the value of some of these things that
11 you mentioned like navigation and so on.

12 Q. Okay. And you can agree that if you left out important
13 features, your study is going to have less reliability?

14 A. That's correct.

15 Q. And you can also agree that your study did not measure
16 aesthetics?

17 A. Aesthetics, it did not measure explicitly, only
18 implicitly it measured brand.

19 Q. So the answer it didn't measure aesthetics.

20 A. Explicitly it did not measure.

21 Q. And aesthetics is an important consideration when
22 consumers purchase a smartphone?

23 A. Yes.

24 Q. And your study also did not measure the ability to sync?

25 A. Sync between applications?

1 Q. Yes.

2 A. Yes, correct, it did not.

3 Q. Okay. So let's go look at some of the questions in your
4 survey, and I wanted to go to your -- your report where you
5 talked about your ASEMAP.

6 MR. STOCKWELL: If you can go to Page 60 of 459,
7 Mr. Barnes.

8 Q. (By Mr. Stockwell) You gave some respondent -- some
9 general ques -- general instructions about the survey,
10 right?

11 A. I did.

12 Q. Okay. Now, your general instructions told respondents
13 that all the features in the study are important features?

14 A. I can read the exact words. Previous research is
15 identified as important, yes.

16 Q. Okay. Previous research. And it's -- it's well known
17 in the survey literature that if you tell someone a feature
18 is important, then survey respondents may inflate the value
19 they ascribe to a feature?

20 A. That's true in general surveys, not in ASEMAP.

21 Q. And timeliness of notification was not mentioned at all
22 in that Annual Buying Guide that you -- we looked at before,
23 correct?

24 A. That's correct.

25 Q. And you actually have no research indicating that the

1 notification feature was important?

2 A. I do.

3 Q. You do?

4 A. Yes.

5 Q. You're claiming to have research showing -- well, let me
6 ask -- let me ask you to look at your deposition, sir.

7 MR. STOCKWELL: Can I have a colleague approach
8 and deliver some materials to Dr. Srinivasan?

9 THE COURT: Yes. Is this for me or the witness,
10 Counsel?

11 MR. STOCKWELL: It's for -- it's for the witness.

12 THE COURT: That's what I thought.

13 MS. WILLIAMS: Ms. Lockhart, do you want me to --

14 COURTROOM DEPUTY: Yes.

15 A. Yes.

16 Q. (By Mr. Stockwell) Now, Dr. Srinivasan, you did give
17 testimony that was used in the prior trial, correct?

18 A. This is against Apple and --

19 Q. No, in this trial -- in the -- in the prior trial,
20 SimpleAir versus Google, you gave testimony, right?

21 A. Yes.

22 Q. You gave sworn testimony under oath?

23 A. You're talking about the deposition?

24 Q. Yes.

25 A. Yes.

1 Q. Okay. I'm going to ask you to turn to the first tab.

2 A. Yes.

3 Q. Should be your -- the January 14th, 2014, transcript of
4 the trial.

5 A. I do.

6 Q. Do you recognize that?

7 A. Yes.

8 MR. STOCKWELL: If we could go to Page 100.

9 A. Yes.

10 MR. STOCKWELL: And if you go to Line 25 -- or
11 sorry, Line 21.

12 Q. (By Mr. Stockwell) It says, question: And you have --
13 you actually have no research that showed the features are
14 important, did you?

15 ANSWER: For many of them I did.

16 QUESTION: But not for the notification feature, did
17 you?

18 ANSWER: Except in an indirect way.

19 QUESTION: You had no direct research that these --
20 this was an important feature, did you?

21 ANSWER: I did not have any direct information, yes.
22 Did I read that correctly, sir.

23 A. Yes, you -- you read that correctly, yes.

24 Q. Okay. So --

25 A. I thought your question earlier was not that, though.

1 Q. You have no source showing whether people considered
2 timeliness of notification in purchasing a smartphone, did
3 you?

4 A. I have my own research.

5 Q. Your own research?

6 A. Yes.

7 Q. It's not -- it's not any research that was reported to
8 us in your expert report, was it, sir?

9 A. I thought the previous survey was reported to you in
10 my -- in -- in -- by -- by the attorneys to you, was it not?
11 The previous survey that was done in I think September of
12 2011, was it not reported to you?

13 Q. Not reported to me, sir.

14 A. Okay. I do not know that. Okay.

15 Q. Now, you have no evidence that Samsung or the other
16 brands you surveyed advertised the ability of a smartphone
17 to receive notifications from app providers as a selling
18 feature of their products?

19 A. One more time your question, please.

20 Q. Okay. So you understand Samsung advertises for
21 smartphones? They advertise their brand?

22 A. Yes.

23 Q. And you have no evidence that Samsung has ever
24 advertised timeliness of notification as a selling feature
25 for a smartphone?

1 A. I have not looked at their advertisements in -- in great
2 detail.

3 Q. And you haven't seen evidence that any other
4 manufacturer or seller of smartphones has advertised
5 timeliness of notification as a selling point?

6 A. I have not looked at advertisements, so I can't answer
7 your question.

8 Q. And you didn't survey how many of the people -- how many
9 people actually were aware of the notification feature
10 before they even purchased the phone, did you?

11 A. Before they purchased the phone, no, I do not know the
12 answer.

13 Q. And you didn't calculate or report the total number of
14 Android users that actually use the Google messaging
15 service?

16 A. Well, I only asked them how many down -- on how many
17 downloaded applications have they received notifications.
18 Is that an answer to your question or is that not?

19 Q. Well, you didn't ask -- you didn't ask the survey
20 respondents anything about the Google messaging service, did
21 you?

22 A. But how else could they receive the message?

23 Q. You asked questions about the Google messaging service
24 in your -- in your survey, sir?

25 A. No, excuse me. I did not ask the question -- as you

1 stated it, I did not ask the question exactly the way you
2 put it. Yes, I did not ask that question.

3 Q. Thank you. Now, you've also, in fact, seen research
4 that tends to indicate receiving notifications are an
5 irritant and an annoyance to some people?

6 A. Yes. I con -- I consider myself as one of them.

7 Q. Okay. And when you gave the instruction on timeliness
8 of notifications, you made that instruction the longest
9 instruction of all of the features and you italicized some
10 of the words in that instruction, didn't you?

11 A. That's correct.

12 Q. Now, that detailed explanation was not provided for any
13 of the other features in your study?

14 A. Because this was a legal matter.

15 Q. Okay. And it's well known in the survey literature that
16 if you emphasize the importance of -- importance of an
17 attribute, you can get an overinflated value for that
18 attribute?

19 A. In general, yes.

20 Q. Now, in the -- in the real world, we can agree that some
21 consumers would not take into consideration timeliness of
22 notifications in their purchase decisions at all?

23 A. That happens in my survey, yes.

24 Q. And your study assumes it's okay to ask consumers to
25 rate the desirability and importance of features even if

1 they don't have prior awareness of the features?

2 A. That's right.

3 Q. But in the real world, if somebody walks into a
4 store and buys a smartphone and they're not even aware
5 of the feature, that feature could not possibly have
6 influenced their decision?

7 A. That they can tell me by saying it is not important at
8 all to them.

9 Q. Okay. And that's not my question, sir.

10 A. Okay.

11 Q. In the real world --

12 A. Yeah.

13 Q. -- if you -- if I walk into the store, I have no
14 knowledge of the feature. I don't know about it directly.
15 I don't know about it indirectly. I've never heard of
16 notifications. No one's ever told me notifications.
17 There's no literature about notifications. I buy the
18 smartphone. The notifications didn't affect my purchasing
19 decision, did it?

20 A. For some people, yes.

21 Q. Now, I want to talk about some of the numbers on your
22 survey. You said you had 623 respondents but only 187 were
23 Android users, correct?

24 A. That sounds right.

25 Q. And of the 623 respondents, you had some results that

1 indicated your customers highly valued -- your -- your
2 respondents highly valued a small battery life?

3 A. There were -- there were some of them, yes.

4 Q. So there were some people that thought, gee, having a
5 battery that didn't work as long was better than having a
6 battery that worked longer?

7 A. The short answer is yes.

8 Q. And that's nonsensical, isn't it?

9 A. It's not nonsensical because I -- I asked them to hold
10 all other things constant. So the question you asked me was
11 about battery life, right?

12 Q. Right.

13 A. Okay. So I am telling them, hold everything else
14 constant, and in particular price constant, and tell me
15 which level of battery life would you prefer the most? Now,
16 most of us in the real world through our experience, we know
17 generally things which we pay a higher amount also -- also
18 have better features, higher quality. So some people were
19 not able to hold that constant, which was the instruction,
20 and hence gave answers like the -- and may have given
21 answers like the one that you just said.

22 Q. And you also had results that indicated some of your
23 respondents wanted to pay more money for a phone that was
24 equal in all respects to a cheaper phone?

25 A. That's also true, yes.

1 Q. Okay. And at the end of the day, you had some lower
2 quality data in your survey, right?

3 A. There were some lower quality data and some higher
4 quality data.

5 Q. And, in fact, you only had -- about 66 percent of your
6 survey had higher quality data?

7 A. I don't have the exact percentage, but it is somewhere
8 in that ballpark, 409 out of 643.

9 Q. And that's roughly 66 percent?

10 A. Okay. I thought you said 56, no?

11 Q. And 66 percent in -- in a professor's class is a D?

12 A. Now, remember this is not -- the other people are not
13 left out. The other people are also carried on in my
14 research. So you can't count a grade in a course to the 66
15 percent. I don't think about it that way.

16 Q. Fair enough. So I want to talk a little bit about your
17 -- your Formula 14 as the -- the last topic here.

18 MR. STOCKWELL: If we could go back to Dr.
19 Srinivasan's Slide 12, Mr. -- Mr. Barnes.

20 Q. (By Mr. Stockwell) Now, you understand that Google's
21 expert, Dr. Dhar, has criticized your Formula 14 as showing
22 that if you could actually use it to calculate the value for
23 the other 15 features you tested, you'd end up with a
24 smartphone that costs a couple thousand dollars. You
25 understand that's one of his criticisms?

1 A. Yeah. He incorrectly used it, yes.

2 Q. Okay. He incorrectly used it, and the way -- the reason
3 you say -- you say he incorrectly used it is that you say
4 Formula 14 only works to measure features that have a small
5 change on the overall value of the product?

6 A. That's correct.

7 Q. It's a theoretical result that applies for small
8 changes?

9 A. That's correct.

10 Q. And you say Formula 14 is going to yield unreliable
11 results if you try to measure the market's willingness to
12 pay for large improvement level features?

13 A. That's correct.

14 Q. Now, let's go back to your Table A1.

15 MR. STOCKWELL: Mr. Barnes, if you can pull that
16 back up again.

17 Q. (By Mr. Stockwell) This was the table that ranked the
18 order of importance of the various features. Now -- so your
19 Formula 14, you would agree, it's not going to work on WiFi
20 access because that's 9.7 percent?

21 A. That's correct.

22 Q. That's too important of a feature for Formula 14 to work
23 on?

24 A. That's right.

25 Q. And we can agree that your study examined -- I think

1 it's that built-in video camera feature there, 4.8. You see
2 that?

3 A. Yes.

4 Q. 4.8 percent importance for the built-in video camera,
5 that's also too big for your Formula 14 to work on?

6 A. That's correct.

7 Q. And there's also a full physical QWERTY keyboard. Do
8 you see that?

9 A. Yes.

10 Q. That's 6 percent importance, and you would agree that
11 your Formula 14 doesn't work for that either?

12 A. That's right.

13 Q. So when you calculated your Formula 14 calculations for
14 the -- the numbers that Mr. Dovel showed you, that \$12.23 --

15 A. Yes.

16 Q. -- you used not only timeliness of notification, but you
17 used battery standby time in making those calculations,
18 right?

19 A. Absolutely correct.

20 Q. Right. So the value for battery standby time, sir, in
21 this Table A1 --

22 A. Yes.

23 Q. -- can you read for us what percent battery standby time
24 says there?

25 A. 6.3 percent.

1 Q. And 6.3 percent is greater than the 6 percent for the
2 QWERTY keyboard, right?

3 A. Yes.

4 Q. And it's also greater for the built-in video camera at
5 4.8, right?

6 A. Yes.

7 Q. And we know that your Formula 14 doesn't work for the
8 keyboard, and it doesn't work for the camera, right?

9 A. That's right.

10 Q. But you nonetheless use Formula 14 for the battery
11 standby time that's at 6.3 percent, didn't you, sir?

12 A. Okay. I have to explain. I use it in a different way
13 than what I think you are -- you are suggesting. In the
14 case of video camera, either you have the video camera or
15 you don't have the video camera. In the case of the QWERTY
16 keyboard, you either have the QWERTY keyboard or you don't
17 have the QWERTY keyboard. In the case of battery standby
18 time, though, I had four levels for battery standby time.
19 The current standby time, 20 percent only of the current
20 standby time -- I think it is 50 percent and 80 percent. So
21 I had four levels. So I can -- using that, I can ask the
22 question if my battery life is lost by only 10 percent --
23 for example, instead of 50 percent, I get 60 percent. That
24 is not the full battery standby time. It is only a small
25 amount of that range of values for battery standby time. So

1 I'm perfectly legitimate to use battery standby time in that
2 way, compared to built-in video camera of the QWERTY
3 keyboard that you just highlighted.

4 Q. But we will agree that if battery standby time is 6.3
5 percent, standing alone, you shouldn't use Formula 14 on
6 that?

7 A. If you want to know what is the value for battery
8 standby time of a current standby time, compared to 20
9 percent, the whole range, then you should not use my
10 formula, correct.

11 Q. Thank you.

12 MR. STOCKWELL: I'll pass the witness, Your Honor.

13 THE COURT: Additional direct, Mr. Dovel?

14 REDIRECT EXAMINATION

15 BY MR. DOVEL:

16 Q. You were asked some questions about respondents who
17 appeared to reverse the order of preference -- that is,
18 respondents that appeared to have -- prefer lower battery
19 life or lower price. Is it common to get those kind of
20 reversals when you do a conjoint analysis?

21 A. Yes.

22 Q. Does that mean that your conjoint analysis is
23 unreliable?

24 A. No, it doesn't mean that.

25 Q. Did you do any assessment to determine what would happen

1 if you were to remove the respondents that gave those
2 reversals, how that would affect your results?

3 A. I did.

4 Q. And when you did that analysis, what did it tell you?

5 A. So I looked at two reversals, both -- the other attorney
6 just pointed out. One was battery life, and the other one
7 was price. In both of those there were -- there were some
8 consumers who had reversed what -- what was desirable. So I
9 made -- I -- I took all those people out and used only the
10 remaining people who did not have those major reversals.

11 Then I found that the market willingness to pay went up from
12 \$12.23 by another 54 cents.

13 Q. All right. So you were able -- were you satisfied that
14 your data was reliable?

15 A. Yes.

16 Q. You were asked some questions about Google's ability to
17 control the prices of smartphones that are sold by Samsung
18 and LG. If the notification feature is added by Google and
19 if LG and Samsung choose to keep price the same, don't
20 increase price, then what happens in the market?

21 A. Android phones -- the number of units of Android phones
22 that are sold will go up.

23 Q. There will be more Android users?

24 A. Yes, there will be more Android users. Yes.

25 MR. DOVEL: No further questions, Your Honor.

1 THE COURT: Additional cross-examination?

2 MR. STOCKWELL: No, Your Honor.

3 THE COURT: All right. You may step down, Dr.
4 Srinivasan.

5 THE WITNESS: Thank you, Your Highness.

6 THE COURT: Ladies and gentlemen, before we call
7 the next witness or have the Plaintiff call the next
8 witness, we're going to take a short recess, about 10
9 minutes. This will probably be our last recess for the day.
10 You may leave your notebooks in your chairs. Don't discuss
11 the case among yourselves, and we'll have you back in here
12 in approximately 10 minutes. So we'll make this one short.
13 You're excused for recess at this time.

14 COURT SECURITY OFFICER: All rise.

15 (Jury out.)

16 THE COURT: All right. The Court stands in
17 recess.

18 (Recess.)

19 (Jury out.)

20 COURT SECURITY OFFICER: All rise.

21 THE COURT: Be seated, please.

22 Let's bring in the jury, Mr. McAteer.

23 COURT SECURITY OFFICER: All rise for the jury.

24 (Jury in.)

25 THE COURT: Be seated, please.

1 All right. Plaintiff, call your next witness.

2 MR. EICHMANN: Your Honor, the Plaintiff calls
3 Robert Mills.

4 THE COURT: All right.

5 MS. WILLIAMS: Your Honor, at this time, the
6 Defendant would like to renew its pretrial objections to Mr.
7 Mills and to Professor Srinivasan.

8 THE COURT: Those have already been raised and
9 ruled on, but so noted.

10 MS. WILLIAMS: Thank you, Your Honor.

11 THE COURT: Have a seat, Mr. Mills.

12 THE WITNESS: Thank you, Your Honor.

13 THE COURT: You have been sworn, correct?

14 THE WITNESS: I have, Your Honor.

15 THE COURT: All right. Mr. Eichmann, you may
16 proceed.

17 MR. EICHMANN: Thank you, Your Honor. And just a
18 brief note to the Court. About 30 minutes into his
19 testimony, there's been a request to seal the courtroom, and
20 I'll notify the Court when we reach that point.

21 THE COURT: Let me know when we reach that point.
22 Let's proceed.

23 ROBERT MILLS, PLAINTIFF'S WITNESS, PREVIOUSLY SWORN

24 DIRECT EXAMINATION

25 BY MR. EICHMANN:

1 Q. Good afternoon, Mr. Mills.

2 A. Good afternoon.

3 Q. Can you introduce yourself to the jury and tell him what
4 your role is in this case?

5 A. Yes. My name is Robert Mills, and I'm an economist from
6 Los Angeles, California. I work for a firm called
7 Micronomics. I'm a director there. And my role in this
8 case is to offer opinions about the damages that should be
9 awarded to SimpleAir for the infringement by Google.

10 Q. Can you tell us about your educational background and
11 how you got to be an expert in this field?

12 A. Yes. My undergraduate degree is from Portland State
13 University in Portland, Oregon. I'm originally from the
14 Northwest, and I have a graduate degree in economics from
15 the University of California at Santa Barbara, and then
16 moved to Los Angeles a couple years after that, and became
17 involved with Micronomics my current employer.

18 And much of my work is in the area of what I'll call
19 dispute, which is where parties are having a dispute and I
20 am consulted for my economic expertise and financial
21 expertise to help -- offer opinions about valuation issues.

22 Q. I'm just going to ask you to slow down a little bit in
23 your testimony so I can keep up with you, please.

24 Have you been called to testify as an expert in patent
25 cases before?

1 A. Yes, I have.

2 Q. Have you testified in this courtroom before?

3 A. I have, yes.

4 Q. And when you've been asked to testify, are you always
5 showing up on the side of the Plaintiff, the patent owner,
6 or do you sometimes provide testimony on behalf of
7 Defendants?

8 A. On both, both sides.

9 Q. In this case, does your compensation depend in any way
10 on how much the jury decides to award in damages?

11 A. No, in no way whatsoever.

12 Q. In this case, you submitted three expert reports; is
13 that right?

14 A. Yes. I submitted an initial report and then two
15 supplemental reports.

16 Q. And just briefly, what is an expert report?

17 A. An expert report is a document that I prepare with the
18 assistance of my staff that sets forth my opinions and all
19 the bases for those opinions. And it's -- it's a narrative.
20 In this case, it ran more than a hundred pages of writing
21 and then a number of exhibits that show the figures -- the
22 financial figures in the charts that support those figures.

23 Q. About how much time did you and your staff spend working
24 on this case to figure out what Google's damages should be?

25 A. In total, I think I've spent about 300 hours working on

1 this case. It wasn't all related to Google, but in this
2 case in general, and -- and my staff assisted me at least
3 that much as well. I'm not sure of the exact hours for
4 staff, but it would be at least that much more.

5 Q. When you were going about your work in this case, what
6 was the information -- what types of information did you
7 consider?

8 A. I considered documents that were provided by SimpleAir
9 and from Google. I considered deposition testimony. I
10 considered certain legal pleadings and filings. I
11 considered information that I and my staff had found through
12 our own research. That's the type of information generally
13 that I rely upon in a case like this.

14 Q. Did you also consider the testimony of the other
15 experts?

16 A. Yes. At the time that I wrote my report and my
17 supplemental reports, I didn't have their testimony, but I
18 had their reports, so I could rely on their reports. And
19 I've done that.

20 Q. Now, in a patent case, how do you determine damages for
21 infringement of a patent?

22 A. So in a case like this, damages are what's called a
23 reasonable royalty.

24 Q. What's a reasonable royalty?

25 A. A reasonable royalty is a -- a royalty that's paid for

1 the use of the patent. So it's a payment that Google would
2 make to SimpleAir in exchange for the right to use the
3 patent for a period of time.

4 And a reasonable royalty is -- it's sort of a legal
5 definition, but it's -- it's the royalty that would emerge
6 from a negotiation if Google and SimpleAir had actually
7 negotiated a license rather than the infringement occurring.

8 Q. Now, we heard a little before about the prior trial in
9 January of 2014. Does that date have relevance to your
10 calculations in this case?

11 A. Yes, it does.

12 Q. When you sat down to determine damages, what period of
13 time did you determine damages for?

14 A. I determined damages for the period beginning in May
15 2010, when that first messaging service was introduced by
16 Google. And I calculated damages through January 2014,
17 actually through the end of December 31st, 2013, which
18 roughly corresponds to the time of the first trial.

19 Q. So is this the period that we're going to address with
20 you today, not what's happened after the last trial?

21 A. That's correct, yes.

22 Q. How did you go about approaching this assignment in
23 terms of which methods to use of calculating damages?

24 A. Well, I looked at damages in two different ways that I'm
25 going to talk about today. One is what's called a

1 Georgia-Pacific analysis, and the second approach that I've
2 used is what I'll call settlement analysis.

3 Q. What is Georgia-Pacific?

4 A. Georgia-Pacific is a company that was involved in a
5 famous patent infringement lawsuit, and the -- the judge in
6 that case established a number of factors, 15 factors, that
7 he felt were important to consider in determining how much a
8 reasonable royalty would be.

9 And these factors have become very important for people
10 like me that do this type of work. These are factors that
11 we consider in determining how much a royalty should be paid
12 for infringement.

13 Q. Did you consider each of the Georgia-Pacific factors in
14 your analysis in this case?

15 A. I did. I've addressed each of those factors in my
16 report, my initial report, and some of the factors in my
17 subsequent reports as well.

18 Q. Under Georgia-Pacific, what's the central question that
19 you're trying to answer?

20 A. Well, the central question is, how much would the patent
21 owner and the infringer agree to in terms of a royalty, if
22 they had negotiated a license agreement rather than the
23 infringement occurring.

24 Q. So in this case, we know that SimpleAir and Google
25 didn't sit down to negotiate a license. That never

1 happened.

2 Under Georgia-Pacific, are you saying we are supposed
3 to assume that that did happen and determine how they would
4 come out in that agreement?

5 A. That's right. In the real world, we know that didn't
6 happen. That's why we're here. So we're asked to think
7 about what would happen, if they had negotiated, and what
8 the outcome of that negotiation would be, if it occurred
9 back at the time the infringement began in May 2010.

10 Q. That's when they offered the first of the services that
11 infringed?

12 A. Yes. C2DM, as I understand it, was first offered for
13 third-party applications in May of 2010.

14 Q. What else do we know about this negotiation and how it
15 would -- how it would occur?

16 A. Well, there's certain facts that we're asked to assume
17 in terms of understanding the parameters of the hypothetical
18 negotiation. One of those is that Google admits that the
19 patent is valid, and Google admits that the -- there is
20 infringement.

21 So Google acknowledges that it needs a license in order
22 to keep doing what it wants to do, which is provide the
23 service.

24 Q. What's this last item on the slide that you have?

25 A. Yes. So another assumption that underlies this analysis

1 is that the parties have access to all of the relevant
2 information, and this is very much different than real-world
3 negotiation where parties will keep things close to the vest
4 and not share information that they don't have to share with
5 the person they're negotiating with.

6 In the hypothetical negotiation framework, we assume
7 that the parties have everything out on the table for
8 everyone to look at so they both have access to all of the
9 relevant information.

10 Q. And does that include what you have here as later
11 events, events occurring not only before but after this date
12 of first infringement?

13 A. Yes. Later events are often relevant in this kind of
14 analysis.

15 Q. What types of later events or information can be
16 considered under Georgia-Pacific?

17 A. Well, things like the extent to which the patent's been
18 used. If the negotiation occurs at the time that the
19 infringement begins, by definition, we don't know how much
20 infringement will ultimately occur.

21 So we can look past that date to see how much
22 infringement actually occurred, and the parties in this
23 hypothetical framework can take that type of information
24 into consideration, even though it's not strictly known at
25 that time.

1 Q. During Dr. Knox's testimony, he was -- we discussed the
2 '279 patent. That's SimpleAir's system patent. Were you
3 here for that testimony?

4 A. Yes.

5 Q. And on cross-examination, Google's counsel pointed out
6 that that patent was filed later and issued later than the
7 patent that's directly in this case; is that right?

8 A. Yes.

9 Q. Could the parties under Georgia-Pacific consider the
10 fact that SimpleAir had other patents coming down the
11 pipeline, such as that '279 patent?

12 A. They could, yes.

13 Q. The -- the law allows that?

14 A. Well, I'm not here to speak -- speak about the law, but
15 that's my understanding. Yes.

16 Q. So we want to talk now about these two questions, and
17 can you tell me what we're going to address next in your
18 presentation?

19 A. Yes. So as I mentioned a bit earlier, I'm looking at
20 two different methodologies here. One is the
21 Georgia-Pacific analysis, and the second is the settlement
22 analysis.

23 And under the Georgia-Pacific analysis, there really
24 are two different questions that I'm addressing under that
25 analysis. The first one is, how much money has Google made

1 from the infringement, and the second one is, how much of
2 that money does Google owe to SimpleAir.

3 Q. Let's focus on this first one about how much they've
4 made from infringing. Now, we've heard a lot about the
5 Android operating system already and how Google doesn't
6 charge for it.

7 Did you consider that in your analysis?

8 A. I did, yes.

9 Q. If they don't charge for it, does that mean that they
10 don't make any money from it?

11 A. No.

12 Q. Does Google, in fact, make revenue, make money from
13 offering the Android operating system for all those
14 smartphones?

15 A. Yes, it does.

16 Q. And what are the ways in which it makes that money?

17 A. Well, the primary way that it makes money is through
18 advertising, and Google generates the vast majority of its
19 revenue through advertising. It also generates revenue from
20 the sale of applications to smartphone owners. It also
21 sells smartphones itself and generates revenue that way.
22 And then also it sells digital content, like movies and
23 music and TV shows and things like that, that you can
24 download to your smartphone for a fee.

25 Q. Let's talk about the advertising parts since you say

1 that's the biggest amount.

2 Can you explain what's depicted on this slide?

3 A. Yes. This is a slide that shows three different Android
4 smartphones, and at the top of each of these home screens on
5 the smartphone, you'll see what's called the Google search
6 bar. And that's -- that's something that's there so that
7 you can enter search terms and retrieve search results.
8 And advertisements are shown oftentimes in connection with
9 those search results, and when you click on those
10 advertisements, Google generates revenue.

11 Q. Did you review in this case the agreements that Google
12 has with the manufacturers of the Android phones, people
13 like Samsung, LG, and HTC?

14 A. I did, yes.

15 Q. And those agreements were at Plaintiff's Exhibit 266 to
16 271?

17 A. Yes, I believe so.

18 Q. What was in those agreements that is relevant to this
19 issue of searching on phones and getting apps?

20 A. Well, those agreements specify that if you want to add
21 Google applications to your phone, you have to do certain
22 things. And one of those things is that you have to provide
23 this search bar in a certain location where it's easily
24 accessible to users.

25 And another -- another requirement is that you make

1 Google's search engine the default search engine for all
2 search entry points on the phone. So what this is designed
3 to do is make sure that when you buy an Android phone,
4 you're more likely to use Google search engine than you are
5 to use, let's say, Microsoft search engine.

6 Q. And explain this slide for us, please.

7 A. Yeah. This slide just shows that the more Android
8 phones Google sells, the more it generates in -- in revenue.

9 Q. And did Google actually produce documents showing how
10 much money it makes from offering the Android operating
11 system?

12 A. It did produce -- for -- for some period of time, not a
13 complete period of time up through today, but for a period
14 of time it did. Yes.

15 Q. What was the most recent period that they disclosed to
16 us?

17 A. If memory serves me correct, I think it was the first
18 quarter of 2013, so about a year ago.

19 Q. So for a quarter, that's a three-month period?

20 A. It is, yes.

21 Q. And they -- for the first quarter of 2013, how much
22 money did they make in total worldwide from the Android
23 platform?

24 A. I'm sorry. In the first quarter?

25 Q. Yes, sir.

1 MS. WILLIAMS: Your Honor, if -- if I'm -- I
2 apologize for interrupting, but I request that if the number
3 is actually going to be stated that we do need to seal the
4 courtroom.

5 MR. EICHMANN: Your Honor.

6 THE COURT: Mr. Eichmann?

7 MR. EICHMANN: I can loop this back in later on in
8 the part that -- I didn't think we had an issue with this,
9 but I can loop this back in later so that we can address it
10 when we had planned to seal.

11 THE COURT: Let's try to do it all at one time.

12 MR. EICHMANN: Yes.

13 THE COURT: Let's continue.

14 Q. (By Mr. Eichmann) Exhibit 49 is the document that Google
15 produced on their Android revenues?

16 A. It is, yes.

17 Q. And did they disclose that they make billions of dollars
18 worldwide from the Android system?

19 A. Yes.

20 Q. And we also know that Google doesn't charge for
21 notifications either, but do they still make money from
22 those as well?

23 A. They don't directly charge for notifications, but they
24 do indirectly benefit from providing them.

25 Q. Can you explain how this works?

1 A. Yes. By providing a feature like app notifications
2 that's valued by consumers and then makes the Android
3 product better, Android is able to sell more phones -- or
4 Google's OEM partners are able to sell more phones, which
5 means that more people are using Android. And if more
6 people are using Android, they're more likely to be
7 searching using Google's search engine able to be generating
8 revenue from Google for advertising.

9 Q. Based on your analysis in this case and your review of
10 the evidence, did you conclude that they're offering of the
11 infringing notification service helps them make more money?

12 A. Yes.

13 Q. Now, did Google talk about in its internal documents the
14 importance of getting instantaneous notification on the
15 smartphones and tablets, the Android phones?

16 A. Yes. We have one example here on the screen where
17 Google is -- an internal Google document, but Google
18 recognized that -- that users see smartphones and tablets as
19 personal devices that are always connected, and they expect
20 to be notified of remote events at all times.

21 Q. And how do the infringing C2DM Cloud to Device Messaging
22 and Google Cloud Messaging services relate to this service?

23 A. Well, they fulfill that need. They provide a framework
24 that provides these real-time notifications that people
25 expect to receive.

1 Q. Do each of Google's major competitors, Apple, Microsoft,
2 BlackBerry, also offer notification services for
3 applications?

4 A. They do, yes.

5 Q. So let's turn, again, to quantifying this -- this amount
6 of money that Google has made from infringing. We heard
7 from Dr. Srinivasan.

8 Did you rely upon him in your analysis?

9 A. I did, yes.

10 Q. And what is shown here on the slide?

11 A. This is taken from Dr. Srinivasan's analysis. This is
12 his market willingness to pay the \$12.23 that we mentioned
13 earlier today.

14 Q. Now, why did you rely upon Dr. Srinivasan instead of
15 perform your own conjoint analysis?

16 A. I'm not an expert in the field of conjoint analysis, and
17 Dr. Srinivasan very much is an expert in that field, so I've
18 relied on him.

19 Q. Is the field of conjoint analysis, the use of that
20 methodology, well regarded by economists?

21 A. Yes. It's -- it's being used more and more, I believe.

22 Q. Now, can you explain to us, again, what this \$12.23
23 number that came out of Dr. Srinivasan's analysis, what that
24 means?

25 A. Yes. This is a measure of the market's willingness to

1 pay for the infringing notification system relative to the
2 next best alternative.

3 Q. I think there might be some confusion from the
4 cross-examination of Dr. Srinivasan. Is this the amount
5 that Dr. Srinivasan is saying people would pay for a single
6 application for the phone?

7 A. No. This is the amount that people would pay for the
8 service, so to provide this notification service that you
9 could use for as many apps as you wanted to use it for.

10 Q. And how much apps -- how many applications receive
11 notifications from the Google service?

12 A. Well, I don't know today how many do, but I know for a
13 point in time -- I believe it was 2013 -- Google provided
14 information on a certain date in 2013. At that point, I
15 think it was about 60,500 applications.

16 Q. So the \$12.23, that's paying for the infringing
17 notification service that provides notifications to 60,000
18 applications?

19 A. Yes, as many applications as a user would want -- want
20 to have notifications for.

21 Q. Dr. Srinivasan also talked about this number, 42.2
22 percent. Can you explain the relevance of this number?

23 A. Yes. This is something that is sometimes called the
24 take rate, and that is the percentage of consumers that
25 would elect to purchase this service, if it were charged

1 separately at \$12.23 per device.

2 Q. Can you explain how these calculations work, the \$12.23
3 and the 42 percent?

4 A. Yes. What I -- what I've done is I've started with the
5 \$12.23 per -- per phone, and I've applied that 42.2 percent
6 take rate to get an average price per phone, average market
7 willingness to pay per phone. So if you apply the 42.2
8 percent to the 12.23, it provides \$5.16 revenue per phone.

9 THE COURT: Would you -- would you speak up a
10 little bit, please, Mr. Mills?

11 THE WITNESS: Yes, Your Honor.

12 THE COURT: Thank you.

13 Q. (By Mr. Eichmann) We've heard evidence that Google
14 doesn't actually charge for the notification service. They
15 don't charge this \$12.23 per phone, right?

16 A. That's correct. Yes.

17 Q. And we've heard references to these numbers from Dr.
18 Srinivasan being imaginary or -- or not real.

19 Do you believe that that's a fair characterization of
20 what this analysis shows, that it's just simply imaginary
21 revenue?

22 A. I'm not sure that I understood the question. Could you
23 please state it again?

24 Q. Were you here for Google's opening statement in the
25 case?

1 A. Yes.

2 Q. And there was reference there to imaginary revenue and
3 how we're focusing on imaginary revenue that doesn't really
4 exist?

5 A. Yes, I understand.

6 Q. Do you believe that that's a fair characterization of
7 what Dr. Srinivasan's analysis shows?

8 A. No, I wouldn't -- I wouldn't call this imaginary
9 revenue. It's -- it is true that Google doesn't directly
10 charge for the -- the infringing service, so there is no
11 direct revenue source, but Google generates value in -- in
12 other ways by distributing this -- this widely freely. And
13 that's the -- the methodology it uses to distribute most of
14 its products in the market.

15 And that doesn't mean that it doesn't profit from those
16 products. It's just a different way of monetizing them.
17 And economic logic tells me that Google must believe that
18 that -- that method of distributing its products is more
19 beneficial to Google than actually charging for the
20 products. So the value is greater by distributing it widely
21 for free.

22 Q. In your report, did you conclude that this is actually
23 the lower bound that they actually very likely make more
24 than this?

25 A. Yeah, I think that's a fair characterization. Yes.

1 Q. Did you also do some further calculations to consider
2 the cost that Google incurs by offering notifications?

3 A. I did, yes. I calculated the cost, and this is a
4 conservatively highest cost, meaning that it could even be
5 lower, but I've used \$2.06 per device.

6 Q. And what does that come out to in infringing profits per
7 Android phone that has the notification feature?

8 A. \$3.10.

9 Q. So we talked about these billions of dollars that they
10 make worldwide from the Android platform, but your analysis
11 doesn't focus on that part, does it?

12 A. No. I've not taken the billion dollars as a starting
13 place or the many billions of dollars as a starting place.

14 Q. Is this the starting point, the infringing profit?

15 A. Yes. For this particular analysis, yes. As I
16 mentioned, there are two methodologies, but for this
17 methodology, that is correct.

18 Q. Is this number, \$3.10 per phone, the answer to this
19 first question of how much money Google has made from
20 infringing?

21 A. That's -- that's an estimate based on all the
22 information I have available to me.

23 Q. What's the second step in your process after we figured
24 out how much money they made?

25 A. The second step is to figure out how -- how the parties

1 would divide that money, if they were negotiating.

2 Q. And when you say that money, how they would divide the
3 \$3.10?

4 A. The \$3.10 per phone, yes.

5 Q. So now that we've already isolated the infringing
6 profit, all the extra profit that they make from infringing
7 SimpleAir's patent, why did you just conclude that all that
8 profit should go to SimpleAir since it's their patent?

9 A. Well, that would leave Google with no incentive to take
10 a license. If SimpleAir took everything, then Google would
11 be no better off by not licensing.

12 Q. SimpleAir has to also get some percentage, right, it
13 wouldn't -- would it be fair to give them zero percent of
14 the infringing profit?

15 A. No. That's sort of the other end of the spectrum, and
16 if Google were trying to say that we're not going to pay you
17 any of that profit, then there would be no incentive to give
18 Google a license.

19 So what that tells us is that we have to come out
20 somewhere in between. There has to be some meeting of the
21 minds of how you divide this -- this money.

22 Q. How did you decide where between those two ranges of
23 zero percent to SimpleAir and a hundred percent to
24 SimpleAir, where the reasonable point would be?

25 A. Well, this comes back to the factors that I mentioned in

1 the Georgia-Pacific case, and I've looked at those factors
2 and thought about how they would influence the bargaining
3 positions and the bargaining power of the parties, the
4 relative bargaining power. And I've looked at those factors
5 in that context to come up with my best estimate of how that
6 would be split.

7 Q. This first item here that you consider for bargaining
8 power, can you explain this one and how it affected your
9 analysis?

10 A. Yes. So the first factor that I've considered here on
11 the screen is that Google -- as I mentioned, Google admits
12 that the patent's valid and infringed, and that's something
13 that would -- would favor SimpleAir in a negotiation,
14 because Google would recognize that it can't get this
15 benefit if it doesn't get the license.

16 Q. And what about this second factor?

17 A. This factor also would tend to strengthen SimpleAir's
18 relative bargaining position at the negotiation because
19 notifications are -- are important to the smartphone market
20 not only to users but to app developers as well.

21 Q. Take us through this next one.

22 A. Yes. So the third factor is that the alternatives to
23 infringing have -- have major disadvantages. We've -- we've
24 heard about the battery impact of the alternative that Dr.
25 Knox thinks is the next best alternative, but there are

1 other impacts as well that aren't considered directly in Dr.
2 Srinivasan's survey.

3 So if those were considered, the market willingness to
4 pay would presumably be higher. That, too, would favor
5 SimpleAir in the negotiation.

6 Q. Did you also consider the extent of use of the patent
7 that's made by SimpleAir in this consideration?

8 A. Yes, not just the extent of use but how that's changed
9 over time. And notifications -- we've heard numbers, 11
10 billion per day. That's a run rate of about 4 trillion per
11 year, and that's not even a current number. And the use has
12 been growing steadily over time.

13 Q. Some of the factors obviously would favor Google as well
14 in the negotiation; is that true?

15 A. Yes, certainly.

16 Q. What's the first one that favors Google?

17 A. SimpleAir is not a competitor to Google, and SimpleAir
18 doesn't offer its own messaging service. And so this is
19 something that would favor Google, because Google would
20 recognize that -- I think Google is an important part of the
21 equation in terms of monetizing these patents.

22 Q. What about this next item? Explain this, please.

23 A. Yeah. So if Google were to charge a separate fee for
24 the service, it is possible that fewer devices would be
25 sold. And that's something that Google would -- a position

1 that Google would raise at the negotiation, and that would
2 tend to favor Google as well.

3 Q. Wasn't it your testimony earlier that they actually sell
4 more phones and make more money from offering the
5 notification service?

6 A. Yes. If you hold the price constant, that's right.

7 Q. No. 7 on your list, explain this one, please.

8 A. Yes. So this factor relates to Google's contribution to
9 the equation. So SimpleAir has a patent, but a patent
10 doesn't equal a product necessarily. There -- there's
11 research and development that Google's also put into the
12 systems, and its engineers have developed the software
13 that's used. And so Google has contributed significantly to
14 the success of this messaging service, and SimpleAir would
15 recognize that in a negotiation. And that -- that factor
16 would favor Google.

17 Q. And what about this last factor, No. 8?

18 A. Yes. So this factor relates to the property that's
19 being exchanged, and it's a license to a patent, a
20 non-exclusive license to a patent, meaning that SimpleAir
21 can also license to other parties like Apple and RIM.
22 And it's not providing anything other than a license to the
23 patent. It's not providing its own software engineers or
24 its own know-how or -- or other property. And this also
25 would favor Google.

1 Q. So where in this range, between zero and a hundred
2 percent, did you decide would be reasonable?

3 A. In my view, Google would have the stronger bargaining
4 position overall given its contributions to the service. In
5 my view, it would be approximately a two-thirds and
6 one-third split. In my view, 30 percent to SimpleAir in my
7 calculations.

8 Q. So 30 percent of the infringing revenue that they make
9 from the infringing notification service, that would go to
10 SimpleAir as the royalty?

11 A. No. That's -- it's 30 percent of the -- of the profit
12 that I've calculated.

13 Q. And what does that turn out to be?

14 A. That turns out to be 93 cents per smartphone, per
15 Android smartphone sold in the United States.

16 Q. So if we take a single phone that makes Google an
17 additional \$3.10 in infringing profit, SimpleAir gets a 93
18 percent royalty on that -- excuse me -- a 93-cent royalty?

19 A. Yes. In my view, a royalty of 93 cents per device is
20 reasonable.

21 Q. And Google gets to keep the rest of that infringing
22 profit?

23 A. Yes. Google keeps all of the rest of the value that it
24 receives from providing this service.

25 Q. Now, what was the next step in determining how much

1 Google owes SimpleAir in royalties on this Georgia-Pacific
2 analysis?

3 A. Well, now I have a rate and I need to apply that rate to
4 a base, and the base is U.S. sales of Android smartphones
5 that are capable of using the service. And these are
6 smartphones that use the Android Version 2.2 or later. And
7 so I've looked to market data to determine how many of those
8 phones were sold.

9 Q. What was the data that you looked at? I see up here we
10 have IDC data. What's that?

11 A. IDC is a company that -- an analyst firm that provides
12 estimates of sales for various high-tech products like
13 smartphones and computers, a very well-regarded firm. I use
14 their data in my analysis very frequently.

15 I also had data directly from certain of the
16 manufacturers, though -- Samsung, LG, HTC -- and those are
17 the ones that come to mind. I may have had one other
18 additional -- Motorola, I believe. Yes.

19 Q. And this data on the phones, that was at Exhibit 258,
20 305, 284 through 287, and 308; is that right?

21 A. Yes, I believe that's correct.

22 Q. Now, you mentioned something about Android Version 2.2
23 and above. Explain why you focused on that particular
24 version of the operating system.

25 A. That's the version of the operating system that came out

1 in May of 2010 when this service was first released. And so
2 I focused on just phones that use that operating system or a
3 later version which also are compatible with the -- the
4 infringing systems.

5 Q. When you made the decision to use that version of the
6 phone and the versions that came after, did you rely upon
7 Dr. Knox's infringement analysis in this case?

8 A. Yes, I did.

9 Q. When you totaled up all the number of phones that they
10 sold in the United States during this period of
11 infringement, how many Android phones were sold?

12 A. Approximately 193 million with Version 2.2 or later.

13 Q. And why did you consider all of the phones, even though
14 some people don't really care about notifications or use the
15 service?

16 A. Because if you recall a few moments ago, I applied that
17 to get an average revenue per phone and an average profit
18 for phone. So this analysis already has built into it the
19 understanding that some people either don't value
20 notifications or don't value them enough to be willing to
21 pay that much for them.

22 Q. So when you decided to use the 193 million phones, you
23 considered the fact that notifications aren't important to
24 some people at all?

25 A. Yes.

1 Q. But are very important to others?

2 A. That's right.

3 Q. So turning back to this timeline, again, we're focused
4 on the period when infringement began, which was when?

5 A. May of 2010.

6 Q. Up until the last trial, which was in January of this
7 year?

8 A. That's right.

9 Q. And that's the period that they sold 193 million phones
10 with this notification feature in the U.S.?

11 A. 193 million phones that are capable of using the -- the
12 service, yes.

13 Q. And just to be clear, Google itself doesn't sell most of
14 these phones. It's the manufacturers that they contract
15 with, right?

16 A. That's right. OEMs as they're called, original
17 equipment manufacturers, manufacture most of these devices,
18 and they're companies like Samsung, LG, Motorola, and HTC.

19 Q. When you apply the 93-cent royalty to the phones that
20 are able to use the infringing notification service, what do
21 the total royalties come out to be for this period of
22 infringement?

23 A. Well, if you do that math, just the 93 cents times the
24 number of units, it comes out to \$179 million.

25 Q. Did you do a further adjustment of that number in your

1 report?

2 A. I -- I did, yes.

3 Q. Can you explain what you did there?

4 A. Yes. So what I've done is I've -- in my view, if the
5 parties had negotiated a license, they would have negotiated
6 very likely a lump-sum license. They also may have
7 negotiated what's called a running royalty where royalties
8 are paid over time.

9 But given Google's other licensing practices and its
10 practices that I saw for SimpleAir, I think it's very likely
11 that there would be a lump-sum royalty negotiation, which
12 means that the money would be paid upfront, you know, a
13 one-time payment. So if the money is paid upfront in the
14 one-time payment, I could expect the payment to be lower
15 because of the time value of money. So I'm discounting of
16 \$179 million to get that to the value as of May 2010, which
17 is \$146 million.

18 THE COURT: Mr. Mills, I'm going to ask you to
19 slow down a little bit. Your speech is very rapid, and if
20 you can slow down. And also, I'll remind you to speak up.

21 THE WITNESS: Yes, Your Honor.

22 THE COURT: Okay. Go ahead, Counsel.

23 MR. EICHMANN: Thank you, Your Honor.

24 Q. (By Mr. Eichmann) So if they had paid royalties over
25 time as the infringement continued, that would be the prior

1 number, the 179 million?

2 A. Yes.

3 Q. But you said you saw evidence that Google actually
4 prefers to pay the money upfront?

5 A. Yes, that's right.

6 Q. And if they did that, that's how we get this number of
7 146 million?

8 A. That's correct. Yes.

9 MR. EICHMANN: Your Honor, at this time, we've had
10 a request to seal the courtroom.

11 THE COURT: All right. Ladies and gentlemen, the
12 Court's had a request to seal the courtroom. The Court's
13 going to grant that request. I'm now sealing the courtroom,
14 which means that if you are in the courtroom -- I'm not
15 talking about the jury; I'm talking about everybody else --
16 and you're not subject to the existing protective order in
17 this case, then you should excuse yourself from the
18 courtroom. Only those subject to the existing protective
19 order should remain.

20 MR. EICHMANN: Your Honor, we're just conferring,
21 because one of the inventors' wives, Ms. von Kaenel -- Mrs.
22 Von Kaenel is in the courtroom.

23 Would it be acceptable to the Court -- yes -- we
24 consider her to be bound by the protective order, and -- all
25 right. I'm sorry.

1 THE COURT: We're either going to seal it or we're
2 not going to seal it. If she's not subject technically to
3 the protective order, she needs to wait outside.

4 MR. EICHMANN: I'm sorry. I thought she was
5 allowed to stay, but it's -- sorry for the disruption, sir.

6 THE COURT: Hang on just a minute.

7 Ms. Smith, do you see anybody else that needs to
8 be excused who hasn't left of the courtroom?

9 MS. SMITH: No, Your Honor.

10 THE COURT: Let's continue, Mr. Eichmann.

11 MR. EICHMANN: Thank you, sir.

12 (Reporter's Note: At this point, the courtroom
13 was sealed and the transcript for the rest of the afternoon
14 was filed under seal.)

15 *****

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17

18

19 CERTIFICATION

20

21 I HEREBY CERTIFY that the foregoing is a true
22 and correct transcript from the stenographic notes of the
23 proceedings in the above-entitled matter to the best of my
24 ability.

25

1

2

3 /s/_Shelly Holmes_____
SHELLY HOLMES, CSR
4 Official Court Reporter
State of Texas No.: 7804
5 Expiration Date 12/31/14

3/17/14
Date

6

7 /s/_Susan Simmons_____
SUSAN SIMMONS, CSR
8 Official Court Reporter
State of Texas No.: 267
9 Expiration Date 12/31/14

3/17/14
Date

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